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ABSTRACT

The purpose of this study was to discover the organizational and personal variables that have prevented some elementary schools from institutionalizing an innovation, Individually Guided Education (IGE). Sample schools were selected from respondents to a Wisconsin Research and Development Center questionnaire. The eight schools studied were among those that, after functioning as IGE schools for three or more years, had discontinued the innovation. Survey research techniques utilizing a semistructured telephone interview schedule were employed to collect data from teachers, principals, and district office personnel. The data collected were categorized, coded, and tabulated by school and respondent position. Respondents identified a number of significant factors that caused their schools to discontinue involvement with IGE. Teachers rated lack of teacher commitment as the most significant cause; principals rated interpersonal conflicts among teachers as the most significant cause; district office personnel rated lack of continuing staff development as the most significant cause; and all respondents rated withdrawal of district financial support as a major cause of discontinuance. (Author/JG)

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Technical Report No. 447

ORGANIZATIONAL AND PERSONAL CONSTRAINTS ON THE SUCCESSFUL INSTITUTIONALIZATION OF INDIVIDUALLY GUIDED EDUCATION

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by

Marilyn Tyler Gaddis

Report from the Project on
Studies of the Implementation of Individualized Schooling

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Center for Cognitive Learning
The University of Wisconsin
Madison, Wisconsin

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- conducting and synthesizing research to clarify the processes of school-age children's learning and development
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- developing and demonstrating improved instructional strategies, processes, and materials for students, teachers, and school administrators
- providing assistance to educators which helps transfer the outcomes of research and development to improved practice in local schools and teacher education institutions

The Wisconsin Research and Development Center is supported with funds from the National Institute of Education and the University of Wisconsin.

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ABSTRACT

ORGANIZATIONAL AND PERSONAL CONSTRAINTS ON THE SUCCESSFUL INSTITUTIONALIZATION OF INDIVIDUALLY GUIDED EDUCATION

MARILYN TYLER GADDIS

Under the Supervision of Professor Marvin J. Fruth

The purpose of the study was to discover those organizational and personal variables which have prevented some elementary schools from institutionalizing an innovation, Individually Guided Education. An eclectic approach embodying six strategies and processes of change provided the conceptual framework for the study.

The study proposed to answer the following research questions:

1. How did school personnel initially become aware of IGE?
2. What commitments were made to implement IGE in the school?
3. How was the IGE program implemented within the school?
4. What support was needed by the school to maintain its IGE program?
5. What variables caused the school to discontinue its IGE program?

The sample schools were selected from respondents to a Wisconsin Research and Development Center questionnaire. The eight schools surveyed were among those that after functioning as IGE schools for three or more years no longer considered themselves in IGE. Survey research techniques utilizing a semi-structured telephone interview schedule were employed to collect data from teachers, principals, and district office personnel.

The data were categorized, coded, and tabulated by school and respondent position. Respondents' comments relevant to the research questions were also included.

The major conclusions were:

1. Teachers became aware of IGE through their school principal, and other respondents became aware through school district personnel.
2. Few respondents had participated in training for assisting staff in making a commitment to IGE.
3. Some districts had not fulfilled their commitment to assist schools in implementing IGE.
4. All schools had conducted staff development workshops, but initial training was not that helpful for changing roles and instituting the program.
5. Continued support at the district level is important for the program's survival.
6. College classes provided helpful additional training for IGE staff.
7. Involvement in activities relating to IGE provided additional support from others committed to the program.
8. As the school's instructional leader, the principal needs a thorough understanding and commitment to the innovation if it is to be continued.
9. Teachers rated lack of teacher commitment as the most significant cause for their school to drop IGE.
10. Principals rated interpersonal conflicts among teachers as the most significant cause of discontinuance.
11. District office personnel rated no continuing staff development as the most significant cause of discontinuance.

12. All respondents rated withdrawal of district financial support as a major cause of discontinuance.
13. The transfer of the principal contributed to the discontinuance of the program.
14. No IGE training for new staff members was cited as a significant cause of discontinuance.
15. District and school board commitment must be present to successfully implement IGE.

Approved by Marvin J. Faulk

Date December 7, 1977

CHAPTER I

INTRODUCTION TO THE STUDY

Research indicates that the successful implantation of an educational innovation within a school entails modifications in its organizational structure, a redefinition of roles and responsibilities, and new modes of human interaction. Despite the complexities that the change engenders, some innovations manage to survive and become institutionalized within the school setting. This study surveys some elementary schools that attempted to institutionalize an educational innovation, Individually Guided Education, were unsuccessful in the attempt, and later discontinued the innovation.

Innovative practices in education have been in vogue in the United States since the development of the public school system. Beginning in the 1950's, and particularly after Sputnik, innovations of many types abounded. Billions of dollars have been expended on curricular materials and staff development activities. Countless hours have been spent in developing guides for adapting these new practices and programs. Despite the tremendous expenditure of time and money, many innovative practices have fallen by the wayside after a brief period in the schools (Rogers 1967, Gross 1976).

The educational innovation examined in this study is that of Individually Guided Education (IGE). It is a comprehensive alternative

to the age-graded, self-contained type of organization which prevails in many elementary schools. It encompasses all elements which typify educational innovations: regrouping of learners; regrouping, realigning, and reassigning teachers; rearranging time schedules; utilizing new materials and facilities; and incorporating new subjects (Alexander 1967, pp. 21-23). A number of studies have been conducted regarding how schools have successfully implemented IGE. This study examined some organizational and personal variables which led schools to discontinue their IGE program.

The terms "change" and "innovation" as used in this study are not thought of as being synonomous and are not used interchangeably. Change is viewed as a process which prepares and sustains an environment for the installation of an innovation.* Change affects organizations, facilities and people to some degree. No matter how extensive the change process, something happens to the status quo. People who comprise organizations and determine facilities possess the unique capability of accepting, modifying, or rejecting the change process. The changes which the adoption of an innovation necessitate are far from simplistic. Thus, such complex educational innovations as IGE require numerous changes in organizational and personal behaviors.

After change has taken place and the innovation has been adopted,

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*An innovation is a concept..., an attitude..., a tool with accompanying skills..., or two or more of these together introduced to an individual, group, institution, or culture that had not functionally incorporated it before (Bhola 1965).

there is a period during which the organization attempts to install the innovation into the environment. If the assimilation is successful, the innovation becomes a part of the basic design, processes and operation of the organization. Its continued existence "is no longer dependent upon the unique commitments and dispositions of leaders and ad hoc and random circumstances" (Maguire, Temkin, & Cummings 1971, p. 2). Thus, the term "institutionalization" signifies that an innovation through successful implementation has become a non-innovation within an organization.

This chapter presents an overview of the development of Individually Guided Education and the seven components. Next, implementation activities and some research related to the institutionalization of IGE is presented. The rationale for the study, statement of the problem, and the significance and limitations of the study follow. The chapter concludes with an overview of the remaining chapters.

The Development of Individually Guided Education

Under the direction of Herbert J. Klausmeier, Individually Guided Education was developed in 1965 as Project MODELS, Maximizing Opportunities for Development and Experimentation in Learning in the Schools (Klausmeier, Goodwin, Prasch, & Goodson 1966). In 1965-66, thirteen schools instituted non-graded units to replace conventional age-graded classrooms. The term "Multiunit Elementary School" was used for the first time in 1967-68 to designate seven elementary

schools which were completely unitized. By 1969, there were fifty IGE schools and the number was increasing rapidly. An agreement was signed in 1969 between the Wisconsin Research and Development Center (R & D Center) and the Institute for the Development of Educational Activities (/I/D/E/A/) for the production and expansion of IGE inservice materials.

The educational importance of IGE was recognized in 1971 by the United States Office of Education when funds were granted to install the program nationwide. The R & D Center was directed to develop a strategy for this large-scale implementation (Klausmeier, Walter, & Lins 1974, p. 4; Walter, Gardner, & MacDermot 1975, p. 13). A four-phase plan for implementation consisting of awareness, first-year changeover, second-year maintenance and refinement, and institutionalization* of IGE was formulated (Klausmeier 1971, pp. 181-184). In addition, an installation model was developed. It consisted of (1) a training chain of five basic elements, (2) a formal installation model involving agreements with states and localities, (3) an implementation design at the school level, and (4) an instructional programming model for subject areas (Walter et al. 1975, pp. 28-29).

Within the training framework, it was expected that states and districts could be involved in an introductory national overview and commitment and would allow principals and unit leaders to attend staff development workshops. Local school staffs were also to be involved in

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*Institutionalization as originally defined by the R & D Center was teacher education institutions developing oncampus programs and preparing building principals and unit leaders for their IGE roles.

pre-school workshops. The R & D Center conducted the national conferences and assisted at the state level. State IGE coordinators were expected to arrange the staff development workshops and to require that each school conduct a pre-school workshop. More than 250 new schools were started in thirteen states under this national plan. After a second year of funding, 620 new schools were implemented (Klausmeier 1971). In 1972, the strategies of the R & D Center and those of /I/D/E/A/ were found to be incompatible and the agreement for mutually developed materials was terminated. During that same period, funds were awarded by the Sears-Roebuck Foundation IGE Teacher Education Project for the preparation of instructional materials to be used in undergraduate and graduate programs and with teachers and administrators for IGE leadership training.

By 1973, the United States Office of Education discontinued its support for implementation and continuing schools moved into maintenance and refinement of their programs. The initial model called for few controls over state and local activities and much was left to their discretion and responsibility. However, in the summer of 1973, the National Institute of Education made funds available to the R & D Center for a third year of implementation. These funds were utilized for: (1) supporting maintenance and refinement activites; (2) establishing IGE state networks; (3) conducting workshops for new IGE implementors; and (4) giving IGE coordinators additional training. In June of 1973, the Association for Individually Guided Education was established to bring together at a national level all those persons and agencies that

were involved in or supportive of Individually Guided Education.

The National Institute of Education provided funding during 1974-75 to continue assistance to the established state IGE networks, to initiate nine new state networks and to found four regional institutes. In addition, a new emphasis was placed on developing strategies for implementing IGE in urban and inner-city schools. With the development of the Leadership Series in 1976, teacher educators, intermediate educational agencies, teacher centers and school districts could plan and implement staff development courses to meet the needs of schools and school districts in making the changeover to IGE.

The innovation, IGE, was developed by the Wisconsin Research and Development Center for Cognitive Learning to:

> ...provide quality education that yields high student achievement, develops the abilities underlying those achievements, and contributes to healthy personality development. This aim becomes a reality in IGE schools that provide an environment in which the individual students learn at rates appropriate to each student and in a manner suitable to each student's learning style and other intellectual and personal characteristics. (Klausmeier 1977, p. 7)

The Seven Components of IGE

To facilitate the purposes of IGE, a total system of seven components was developed. While each component was designed to facilitate certain aspects of the system, an interrelatedness existed among them. The seven basic components are shown in Figure 1.1 and an overview of each component is now presented.

Figure 1.1 Seven Components of Individually Guided Education

Source: H.J. Klausmeier, M.R. Quilling, J.S. Sorenson, R.S. Way, and G.R. Glasrud. Individually Guided Education: Guidelines for Implementation. Madison, Wisc.: Wisconsin Research and Development Center for Cognitive Learning, 1971, Chap. 2.

Multiunit School Organization

The organizational component was developed cooperatively by school districts and university personnel to provide an environment for articulating vertical and horizontal relationships, facilitating

immediate and long-range planning, providing instructional accountability at all levels, increasing involvement in shared decision making, improving communication among staff, and defining organizational roles and responsibilities (Lipham & Klausmeier 1976, pp. 10-11). Such an organization involved a substantial restructuring of the school's organization to accommodate the Instruction and Research (I & R) Units and an Instructional Improvement Committee (IIC). A new staff role was also created, that of unit leader, who was responsible for coordinating the instructional activities within the I & R unit.

The three levels of the multiunit organization are the Instruction and Research Unit at the classroom level, the Instructional Improvement Committee at the school level, and the Systemwide Program Committee (SPC) at the district level. Each provides for planning, decision making, and evaluation at its level (Figure 1.2).

Instruction and Research Unit

The main functions of the I & R unit are to plan, carry out, and evaluate instructional programs for each student within the unit, to engage in staff development activities, to provide preservice teacher education activities, and to plan and conduct a systematic program of research and development (Sorenson, Klausmeier, & Lipham 1976, p. 16). The unit consists of a unit leader, three to five staff teachers, interns and/or student teachers, paraprofessionals, an instructional secretary, and 100-150 students. The unit's students are multigraded with an age span of 2-4 years. Through the collaborative

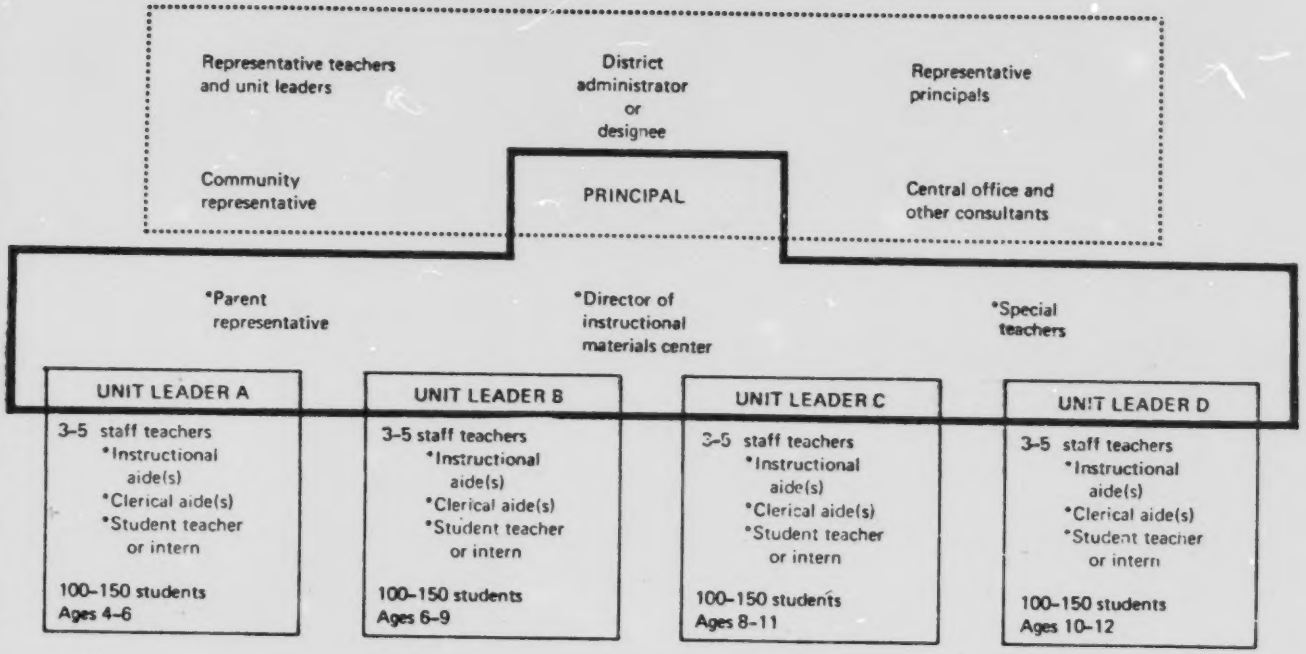


Figure 1.2 Multiunit Organization of an IGE School of 400-600 Students

Source: Adapted from H.J. Klausmeier, R.G. Morrow, and J.E. Walter. Individually Guided Education in the Multiunit School. Madison, Wisc.: Wisconsin Research and Development Center for Cognitive Learning, 1968, p. 19.

efforts of the unit at its weekly meetings the interests, capabilities and skills of each unit member are considered when developing, planning, conducting, and evaluating the unit's activities.

Instructional Improvement Committee

This committee is composed of the principal, unit leaders, and others depending on the local school (Figure 1.2). Within this group the general educational objectives for the school are formulated; system, state, and federal policies affecting the building's educational program are interpreted, implemented, and evaluated; to achieve continuity among units, curricular activities are coordinated; and facilities, resources and time not accounted for by the units are considered (Klausmeier 1977, p. 18). In addition, the Instructional Improvement Committee (IIC) plans and implements pre- and continuing inservice, coordinates the school's involvement with teacher education institutions, and effects the school's home-school-community relations program. When the IIC develops policy and makes decisions, the suggestions and the concerns of unit members are voiced by the unit leader. This provides a means for open communication among all staff members at the building level.

Systemwide Program Committee

Originally called the Systemwide Policy Committee, the SPC facilitates IGE at the district level. It establishes guidelines for schools which adopt IGE and it recommends changes in school district policy to aid in implementing IGE. Chaired by the superintendent or

his/her designee, the group also identifies functions to be performed by the district's IGE schools, recruits personnel and provides for their inservice, plans an effective home-school-community relations program, and provides for essential physical resources and instructional materials (Sorenson et al. 1976, p. 17). Additionally, the committee develops and recommends to the school district policies regarding IGE staff development, recruitment and transfers. The committee, which includes central office personnel; representative principals, unit leaders, and teachers; and members of the community should have decision-making powers, a knowledge of IGE, and should represent all organizational levels. In some districts, an alternative office committee performs the functions of the SPC.

Roles and responsibilities are differentiated in the structure of the multiunit school organization. A new role, the position of unit leader, has been created. The primary responsibilities of this role are to direct (1) the planning and coordination of the instructional activities in the unit; (2) the allocation of materials and resources; (3) the effective working relationships within the unit and between other units; and (4) the instruction of unit members, including interns, instructional aides, and beginning teachers (Sorenson et al. 1976, p. 18). By representing the unit on the IIC, the unit leader can define the unit's program in relation to that of the entire school, and can also voice the concerns of the other members of the unit on various matters. The position provides an opportunity for a teacher to become a change agent when guiding the unit in developing a challenging

environment for student learning.

The principal in a multiunit school assumes the role of an instructional leader. He/she directs the IIC, chairs the meetings, and insures the facilitation of decisions which can be implemented effectively. The prime responsibilities continue to be the selection, assignment, and orientation of staff; the management of financial and physical resources for the educational program; the continued improvement of the instructional program; and the initiation and utilization of extraorganizational relationships for an effective home-school-community relations program (Lipham & Klausmeier 1976, p. 13).

The role of the teacher in the multiunit structure shifts from individual to collaborative planning, instructing, and evaluating students. The unit organization also necessitates that a teacher be directly involved with large numbers of students, various types of instructional grouping patterns, and varied materials to meet a wider variety of student needs. During the unit planning periods, when assisting other unit members, and in the actual teaching process, the capabilities and interests of each staff member within the unit are considered.

Instructional Programming for the Individual Student

The Instructional Programming Model (IPM) is unique to IGE and provides the conceptual framework for developing an instructional program to meet the cognitive, psychomotor and affective domain needs of the individual student (Figure 1.3). Within the framework, school

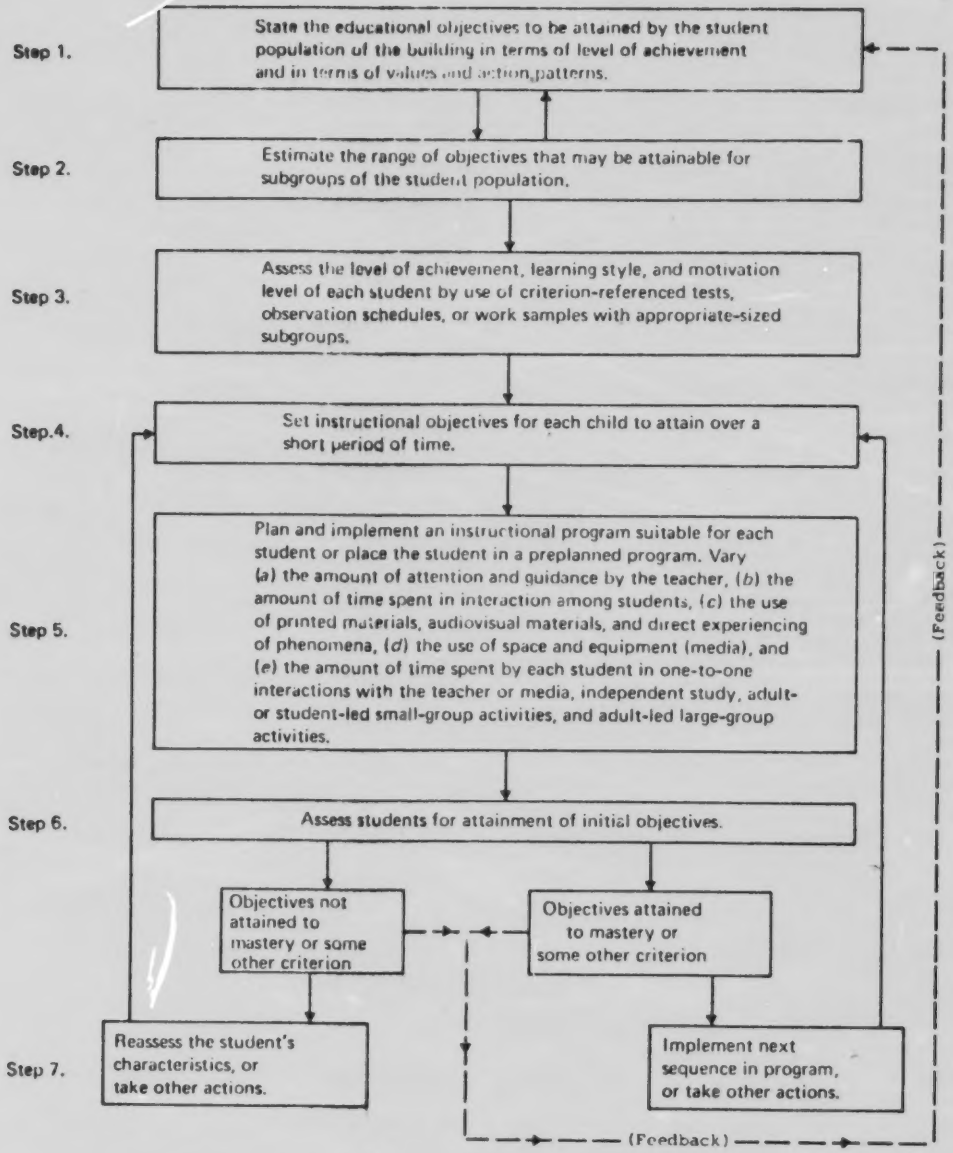

Step 1.
State the educational objectives to be attained by the student population of the building in terms of level of achievement and in terms of values and action patterns.
Step 2.
Estimate the range of objectives that may be attainable for subgroups of the student population.
Step 3.
Assess the level of achievement, learning style, and motivation level of each student by use of criterion-referenced tests, observation schedules, or work samples with appropriate-sized subgroups.
Step.4.
Set instructional objectives for each child to attain over a short period of time.
Step 5.
Plan and implement an instructional program suitable for each student or place the student in a preplanned program. Vary (a) the amount of attention and guidance by the teacher, (b) the amount of time spent in interaction among students, (c) the use of printed materials, audiovisual materials, and direct experiencing of phenomena, (d) the use of space and equipment (media), and (e) the amount of time spent by each student in one-to-one interactions with the teacher or media, independent study, adult- or student-led small-group activities, and adult-led large-group activities.
Step 6.
Assess students for attainment of initial objectives.
Objectives not attained to mastery or some other criterion
Objectives attained to mastery or some other criterion
Step 7.
Reassess the student's characteristics, or take other actions.
Implement next sequence in program, or take other actions.
(Feedback)
(Feedback)

Figure 1.3 Instructional Programming Model

Source: Adapted from H.J. Klausmeier, M.R. Quilling, J.S. Sorenson, R.S. Way, and G.R. Glasrud, 1971, p. 19.

objectives are stated relative to the skills that a student should acquire during the elementary school years. The criterion level for mastery of the skills is also stated. The student's beginning level of performance, rate of progress, style of learning, level of motivation, and other characteristics are considered (Klausmeier, Sorenson, & Quilling 1971, p. 91). Based on the developed objectives, an instructional program is individualized for the student.

The seven steps of the IPM permit teachers to plan, implement, and evaluate a unit of instruction for each student. The steps consist of:

Step 1 - General educational objectives for the school as established by the IIC

These objectives are formulated from input from the units and deal with levels of performance of achievement for the curricular areas in relation to acceptable value orientations and desirable action patterns (Sorenson et al. 1976, p. 19). The stated objectives are terminal to be attained in a year or longer and they provide continuity between and among the units' instructional programs.

Step 2 - Specific educational objectives for subgroups of students

From the schoolwide objectives formulated in Step 1, the units assume certain objectives to be attained by the students within the unit. Some overlap in objectives will exist among units due to the multi-aged composition of the units and the commonality of the needs among age groups.

Step 3 - Assessment of student needs in relation to specific educational objectives

Evaluative information for assessment may be made at the beginning, during, and at the end of an instructional unit or when a new curricular area is introduced in the school. Such assessment, utilizing a criterion-referenced base and format, can take the form of paper and pencil tests, work samples, teacher observation, or performance tests. With such information, the instructional needs of students can be determined.

Step 4 - Setting of instructional objectives for individual students

The student's individual objectives are those objectives not attained or the next objectives in a sequenced activity.

Step 5 - Planning, implementing, and evaluating the individual student's instructional program

To provide the proper learning environment for each student, the unit considers different modes of instruction, utilization of different materials, different kinds of teacher assistance, and varying amounts of time for instruction. The personal characteristics of sociability, motivation, and emotional maturity are also considered (Sorenson et al. 1976, p. 21).

Step 6 - Assessing the attainment of instructional objectives

Assessment to determine whether an objective has been mastered occurs at the completion of a unit of instruction or when the teacher feels that the student has attained the instructional objective.

Step 7 - Determination of the next phase or step for the individual student

If the objective has been mastered, the student proceeds to the next identified instructional objective. If the student has not achieved mastery, the learning sequence is repeated using different activities or materials or the student can follow another sequence, returning to the non-mastered sequence at a later time.

Not all instruction is carried out in the same manner. The unit considers whether stated objectives are to be attained by all students, whether the criterion for attainment is the same for all students, and whether units of instruction will follow a fixed or variable sequence. The model also implies that:

> ...objective-based instruction may proceed differently in various curricular areas, rather than prescribing that objective-based instruction should proceed in an identical manner in all curricular areas. (Lipham & Klausmeier 1976, p. 14)

To provide for this, eight patterns of instructional programming have been developed and they are presented in Figure 1.4. The IPM brings into play systematically all material and human resources available for planning an instructional program for students.

Evaluation for Educational Decision Making

The third component, Evaluation for Educational Decision Making, relates to decisions at all levels of the school organization. It encompasses (1) staff personnel, (2) curriculum development, (3) resource management, (4) home-school-community relations, and

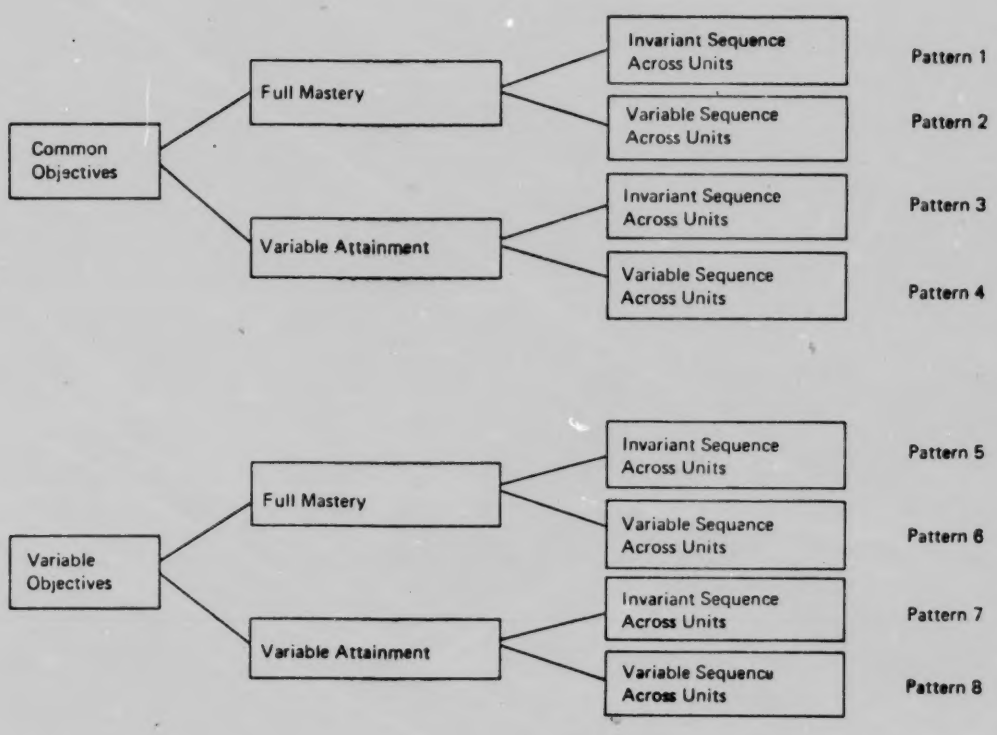


Figure 1.4 Patterns of Instructional Programming

Source: H.J. Klausmeier, R.A. Rossmiller, and M. Saily. Individually Guided Elementary Education Concepts and Practices. New York: Academic Press, 1977, p. 61.

(5) instructional programming for the individual student (Sorenson et al. 1976, p. 22). Decision making in these areas is facilitated through problem identification, gathering and evaluating data relevant to the problem, and establishing possible options. The amount and extent of staff involvement in decision making largely determines how effectively the decision will be implemented. The structure of the multiunit school provides opportunity for comprehensive involvement in decisions at all levels. Teachers and administrators in IGE schools are continually

making decisions, serving as both evaluators and decision makers.

In determining a student's instructional program, decisions are made at the beginning of instruction, during the actual instruction, and at the completion of an instructional unit. The IPM (Figure 1.3) serves as a model for making such decisions. The steps in the IPM provide a means to evaluate student learning through program goals - Step 1, program objectives - Step 2, assessment of a student's instructional needs - Steps 3 & 4, program planning and formative evaluation - Step 5, and summative evaluation of learning outcomes - Step 6 (Spuck 1976, p. 117). For effective planning and implementation of an instructional program, evaluation and decision making play integral parts.

Compatible Curriculum Materials

The Wisconsin R & D Center, and other centers, labs, and organizations, have developed a variety of curricular materials which are compatible with IGE instructional programming and evaluation. These materials are designed to be (1) accurate and reliable, (2) learnable by students, (3) teachable by teachers, and (4) suitable in terms of cost and amount of inservice required for utilization. The objectives within the material have clearly stated objectives and the assessment tools and procedures relate to the objectives. Further, lists of print and non-print materials are included, instructional activities are suggested for students and guides are provided for teachers (Klausmeier 1975, pp. 48-83). Prior to adopting any materials, the school or a school district should evaluate them for compatibility with the philosophy of IGE.

Home-School-Community Relations

To implement effectively an instructional program for the child, it is necessary to have an understanding of his/her home and community environment. This can be brought about through an effective home-school-community relations program. Goals of such a program are:

1. To make the staff more aware of available resources and more responsive to educational expectations of the community, parents, and students.

2. To make the community, parents, and students more aware of and responsive to the requisites of the instructional program implemented through IGE.

3. To identify and utilize ways and means of actively involving both staff and community in the implementation phases of IGE. (Fruth, Bowles, & Moser 1977, p. 19)

Through effective communication and involvement of all subpublics, it is possible to maintain an effective instructional program for children and to implement successfully the IGE system.

Home-school-community relations function at three interdependent levels. At the school district level, the power and resources of the community will support the instructional program if the schools are sensitive to the values and interests of the larger community. Within the local school community, the most influential group is that of parents who also exert a great deal of influence in the larger community. At the third level is the I & R unit which is obligated to communicate to the parents the aims of the school in relation to the

child's cognitive, affective, and psychomotor development. The unit also has the responsibility for informing parents about the organization, procedures, and programs being used in IGE.

Facilitative Environments

To support and maintain IGE as a viable alternative form of schooling there exists a system of facilitative environments (Figure 1.5). Within the system, the intraorganizational environment consisting of the multiunit organizational structure, provides the physical and material resources necessary for an effective learning environment. To facilitate the teaching-learning process within this environment, systematic planning, programming, budgeting, and evaluation take place. To provide the linkage between the school district and the larger environment, an extraorganizational environment operates in many states. The state education agency, intermediate educational agencies, teacher education institutions, and teacher and parent organizations are represented. To provide a structure for these extraorganizational relationships, a trilevel hierarchical arrangement is often used (Figure 1.5). The support that IGE schools need due to the changes that take place in their administrative structure and in their instructional practices is provided by the state agencies that have the legal responsibility for education. Thus, the facilitative environments through the linking of all groups involved in the educational process can sustain a self-renewing system of education.

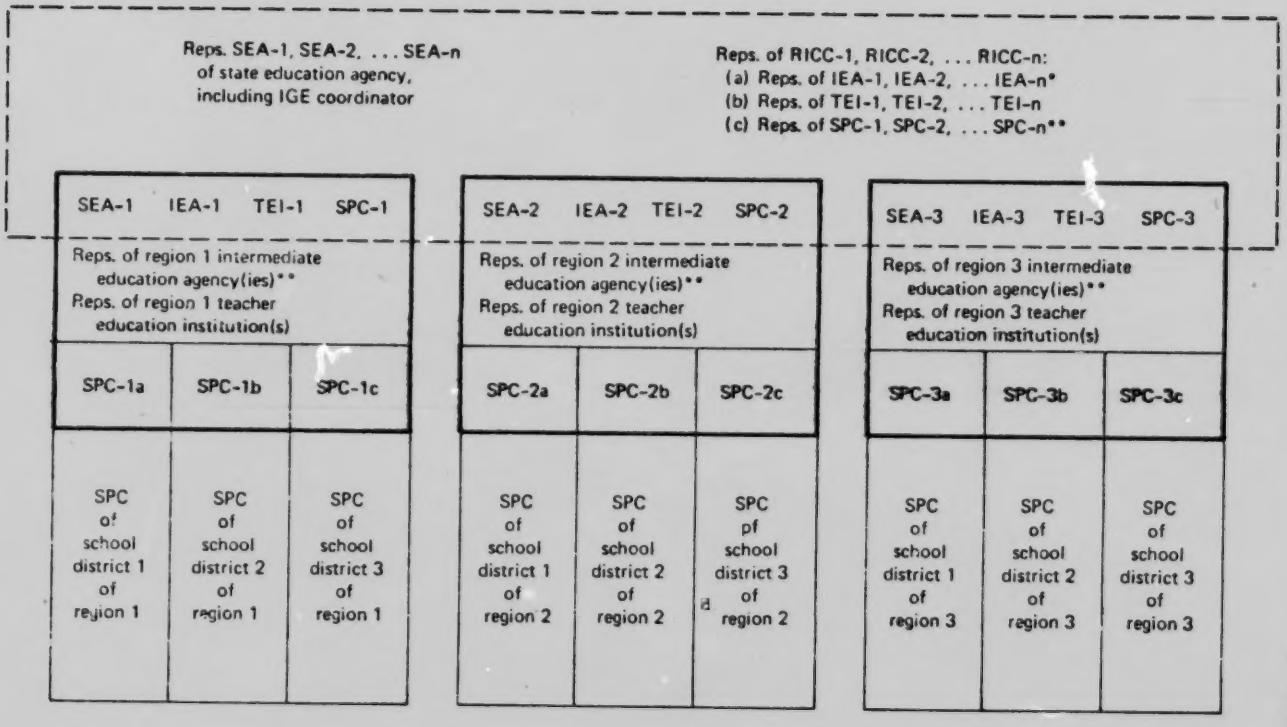

Reps. SEA-1, SEA-2, ... SEA-n
of state education agency,
including IGE coordinator
Reps. of RICC-1, RICC-2, ... RICC-n:
(a) Reps. of IEA-1, IEA-2, ... IEA-n*
(b) Reps. of TEI-1, TEI-2, ... TEI-n
(c) Reps. of SPC-1, SPC-2, ... SPC-n**
SEA-1 IEA-1 TEI-1 SPC-1
Reps. of region 1 intermediate education agency(ies)**
Reps. of region 1 teacher education institution(s)
SPC-1a
SPC-1b
SPC-1c
SPC of school district 1 of region 1
SPC of school district 2 of region 1
SPC of school district 3 of region 1
SEA-2 IEA-2 TEI-2 SPC-2
Reps. of region 2 intermediate education agency(ies)**
Reps. of region 2 teacher education institution(s)
SPC-2a
SPC-2b
SPC-2c
SPC of school district 1 of region 2
SPC of school district 2 of region 2
SPC pf school district 3 of region 2
SEA-3 IEA-3 TEI-3 SPC-3
Reps. of region 3 intermediate education agency(ies)**
Reps. of region 3 teacher education institution(s)
SPC-3a
SPC-3b
SPC-3c
SPC of school district 1 of region 3
SPC of school district 2 of region 3
SPC of school district 3 of region 3

Figure 1.5 Prototypic Organization Arrangements of a State-Regional-Local IGE Network

Source: H.J. Klausmeier, J.E. Walter, and L.J. Lins. Manual for Starting and Maintaining State IGE Networks. Madison, Wisc.: School of Education, University of Wisconsin-Madison, 1974, p. 22.

Continuing Research and Development

To adapt effectively the IGE instructional program to the individual and to meet the needs of a changing society, a continuing program of research and development is necessary. A variety of agencies are involved in the effort and they are translating research and development results into products that can be utilized efficiently by teachers and children. At the local level, the school staff is continuously conducting evaluative research when determining the effectiveness of the IPM as implemented. A number of organizations are conducting long-range development-based research on curricular materials, measurement tools, and the seven components of IGE (Lipham & Klausmeier 1976, p. 21). Through the cooperative research and development efforts of many individuals and agencies who are continually expanding the knowledge base of IGE, the IGE system will continue to improve and develop.

IGE Implementation Activities

From the previous discussion, one can see that in adopting the innovation, IGE, modifications must be made in the organizational structure of the school, new roles and responsibilities have to be assumed, decision making becomes a shared responsibility and additional materials, personnel, and training are needed. Thus, IGE as it is presently constituted contains the elements of a number of existing educational practices and philosophies blended into one educational

innovation for the purpose of improving the learning climate for each child.

To facilitate the adoption and implementation of IGE, the R & D Center in cooperation with local, intermediate, and state agencies developed materials and strategies for inservice programs. The programs provided (1) awareness activities to prepare principals and unit leaders for the changeover to IGE, (2) staff inservice activities for the first year in the program, and (3) maintenance and refinement activities based on the needs of the school after initial implementation. These inservice activities enabled the school staff to acquire the basic concepts and understandings for the changeover to IGE and they helped IGE personnel attain the performance objectives established by the R & D Center (Klausmeier et al. 1974, p. 45).

The inservice sequence included a one-day awareness conference for school district personnel to give them enough information for a decision on whether to adopt IGE. The commitments to the program relative to the school district and suggestions for additional inservice for the changeover to the program were also provided. Following the awareness conference, a three-day principal and prospective unit leader workshop was held to present IGE concepts and practices. At the conclusion of this workshop, participants could describe the multiunit structure of the school, identify roles and responsibilities of IGE personnel, explain the steps and processes of the Instructional Programming Model, outline the procedures for implementing IGE within the school building, and conduct inservice programs for the other

staff. To conclude the sequence prior to implementing the program, a three- to five-day staff development workshop was conducted by the principal and the unit leaders for the total school staff.

During the first year of IGE, continuing inservice sessions were planned to assist personnel with implementation problems. Opportunities were provided to visit other IGE schools, meet with IGE resource personnel, and to attend workshops and conferences. Such activities were designed to ease the transition from the existing school programs and organization to the actual implementation of the innovation.

Maintenance and refinement activities focused on those skills and understandings needed by the school staff to meet their needs for continuing the IGE program. The activities included institutes of one to four weeks, semester courses at colleges and universities, and summer and evening sessions. The activities centered around skill building, exchanging ideas, problem solving, and utilizing new information from a variety of sources. The sequence of activities was designed to assist the school staff with the successful implementation and eventual institutionalization of IGE.

Research Related to the Institutionalization of IGE

Several studies have been conducted on the various aspects of IGE encompassing organizational change and outcomes, roles and relationships, and decision making. No studies have looked directly at the causes for discontinuing IGE, but some studies have alluded to problems

with change strategies and the implementation of IGE as a major educational change. Findings from the studies relevant to the present study will be cited.

Howes (1974) examined those variables related to successfully implementing and institutionalizing the IGE multiunit organization. Through questionnaires sent to over 2,000 unit teachers, unit leaders, principals, district coordinators and superintendents, she concluded that certain general variables were of importance in understanding change in relation to IGE. These variables described: (1) the perceived relative advantage, observability, and simplicity of the change; (2) the degree to which the individual was informed of, involved in, and supported in the change process; (3) the way and degree to which individuals communicated with each other; and (4) the way and degree to which the organization was complex and less formalized.

Further, Howes developed a change model from her study that she assumed was different from previously described change models. She thought that her model was dynamic and not a constant model to be used for all individuals or organizations. Since individuals are unique, each one has a different role, position, information channel, and involvement in the organization. However, she did feel that there were three categories of change which were constant across groups within the organization. They were the process of change, the attributes of the change, and the structural arrangements of the organization undergoing change. She concluded that schools could be more successful in institutionalizing the multiunit component of IGE if they:

1. Eliminated certain role conflicts as outlined in the study.

2. Involved administrators more directly in the process of institutionalization.

3. Set up mechanisms to help each role group, encourage each role group to become acquainted with the perspectives of other groups.

4. Institutionalized those characteristics of a facilitative change environment which were previously described.

The relationships among the systems involved in the development of products of knowledge and the institutionalization of these products was addressed by Paul (1974). There was a positive relationship in the linkage between teacher education institutions and schools in the diffusion of the multiunit school concept. In studying the facilitative environments existing in three states, he found that the dissemination of IGE was effective through organizations with knowledge of IGE and having the capability of assisting schools in the changeover process. Training sessions and direct contact with personnel also aided successful implementation efforts.

The amount of linkage and the influence of the organizations which comprise the facilitative environment were determined. Teacher education institutions played a major supportive role through the contacts made by their personnel and student teachers or interns. The least supportive role was played by the R & D Center in relation to local schools. This precipitated uncertainty about the Center's role in the diffusion of the innovation. The study pointed up the necessity

for providing a strong linkage strategy among organizations to facilitate the successful implementation of IGE.

In adopting IGE, the principal was found to be the major decision maker in a study by Goodridge (1975). The decision making was shared with the teaching staff in most cases while district office personnel were minimally involved. To aid in making the decision, practitioners from functioning IGE schools were felt to be the most influential and successful change agents. The credibility of the outside facilitator was often challenged. Initially, the decision makers thought that they had acquired adequate knowledge about IGE but as time passed, they found that their background was inadequate.

Teachers generally were not given the option to transfer if they did not want to implement the innovation. Other teachers, while agreeing to adopt IGE, did not make a commitment to the system and never modified their instructional methods or behavior. Consequently, Goodridge found that some schools claiming to have implemented IGE bore little resemblance to the system as developed by the R & D Center. The results of the study did show that a relationship existed between the extent of teacher involvement in the decision to adopt IGE, the effectiveness of the implementation of the innovation, and teacher satisfaction with the innovation over time.

In a follow-up to his 1972 study of the Nationwide Installation of the Multiunit/IGE Model for Elementary Schools, Ironside (1973) found that schools were closer to institutionalizing the organizational and instructional changes related to the multiunit school than they had

been in his previous study. He did note that success in one of the components did not necessarily relate to continuing success in the other components and that the instructional programming aspect of the model was very difficult to adopt. The researcher also found it hard to determine whether or not schools had made changes in the model, so he took this to mean that there was adoption and continuation of the multiunit organization. Findings indicated that a well-defined set of goals was necessary at the outset of implementation; there must be measurable amounts of commitment, materials, support and awareness; and there existed a real need to aid and reinforce schools with technical assistance. Schools did note a wide range of obstacles in implementing IGE which included a lack of time available for planning, grouping, and preparation by units; difficulty with the Instructional Programming Model; and a need for assistance, training, and reinforcement.

In a study of two elementary schools that received organizational development training to assist them in moving from a traditional school to the multiunit school structure, Smith (1972) studied factors that resulted in one school accepting the change and the other one rejecting it. Differences between the schools showed that there was a difference in the manner of choosing the subsystem for training. In the school that rejected the change, the principal appointed the team whereas in the other, the individuals volunteered. The principal seemed to play a key role in both schools. While charisma was extremely important, success with the change could not have been achieved without help from outsiders, influential staff members who favored the

change with which to interact, and a comfortable feeling toward shared decision making. She noted in the school that failed that there was a growing ambivalence toward change, a resentment of spending any extra time working, confusion over the concept of differentiated staffing, and the constant mention of lack of money to pay people for extra work. One important outgrowth of the study was a checklist of tentative hypotheses that could be used by schools to achieve success when instituting an innovation.

Several elements were common in the studies that were reviewed. Among them one notes the significance of the principal as an agent of change, the commitment needed by individuals in adopting and implementing change, the importance of understanding what the innovation is and what changes it will make in the organization, the necessity for interaction with people who have already adopted the innovation, and the support needed from the facilitative environments for implementing the innovation.

Rationale for the Study

Educators are just beginning to look at failures in relation to educational innovations to ascertain whether new practices are more effective than more traditional approaches. Outside educational circles, there are those who note that additional funding for education has not really made an impact on the problems that innovative programs were going to solve.

The U.S. Office of Education awarded a contract in 1969 to the American Institutes for Research to study what end products "intensive" innovative practices in grades 1-12 really produced. The findings of Project LONGSTEP showed that:

1. The expectation that substantial yearly gains in student achievement was not supported by the findings.

2. Innovative school environments did not demonstrate a substantially positive impact on either achievement or attitude.

The most important finding was the lack of either substantial or consistent student achievement in relation to innovativeness across grades. They concluded:

> ...educational innovation per se will not necessarily produce dramatic effects on student achievement. Educational quality is not synonymous with innovation or individualization...more (innovation) is not necessarily better (education). (American Institutes for Research 1976, p. 21)

Berman and McLaughlin (1976) from the Rand Corporation looked at the change agent programs aspect of the federally subsidized Title III Innovative School Projects, wherein money was granted to districts to stimulate and spread educational innovations. It was learned that many innovative programs failed or produced disappointing results because they were not implemented according to plan. Their feeling was that there must be a mutual adaption involving the design adapted to the local setting and organizations and members adapting to the demands

of the project. The components that they felt led to success instead of failure were: (1) adaptive planning, (2) staff training keyed to the local setting, and (3) local material development.

Most studies of specific innovations in the schools have concluded that anticipated outcomes have not been achieved and educational benefits were minimal. Many have speculated on reasons for the failure of change efforts in which they were involved or supportive (Gross 1976). Miller (1967, p. 377) felt that educators did not have sufficient confidence or security to study openly and objectively their mistakes and failures. He felt there was a need for rigorous and continuous evaluation, even though a bias seemed to exist against evaluation by educators. Howe (1968) seemed to sum it all up, stating:

> Effectiveness depends on dissemination about success of a project; just as important is dissemination about failure of a project. Whenever we have change in which there is some element of innovation, people are sometimes going to fail. Dissemination of failure is, of course, a more difficult requirement because we educators seldom examine our failures honestly. We very rarely admit that something new we initiated has failed to work out or to produce what we expected and, therefore, should be abandoned. (pp. 181-182)

It seems imperative, therefore, that to institute change successfully, one needs continually to evaluate and study objectively the success and the failures. This study is an attempt to discover through interviewing teachers and administrators those variables that they felt caused an innovation, IGE, to be discontinued after it had been implemented in the school. This study is an examination of some schools

that implemented an educational innovation that failed to become institutionalized.

Statement of the Problem

The purpose of this study was to discover those organizational and personal variables which had constrained the institutionalization of Individually Guided Education as a major educational change. The study utilized some phases of the implementation strategy as formulated by the R & D Center in seeking to answer the following questions:

1. How did school personnel initially become aware of IGE?
2. What commitments were made to implement IGE in the school?
3. How was the IGE program implemented within the school?
4. What support was needed by the school to maintain its IGE program?
5. What variables caused a school to discontinue its IGE program?

Utilizing survey research techniques to gain answers to the questions which had been posed, a total of 32 teachers, 8 principals, and 4 district office personnel representing 8 elementary schools were interviewed by telephone. The respondents represented schools selected from a population of schools that had replied to the IGE Schools Questionnaire sent out by the Evaluation Section of the Wisconsin Research and Development Center in March 1976. On the questionnaire, 94 schools

indicated that they no longer considered themselves functioning IGE schools. From this group, 40 schools that had implemented IGE between 1971-73 and who had functioned as an IGE school for three or more years were selected in 12 states. The principals in the selected schools were contacted by telephone by the researcher and asked questions concerning when and what agency had helped the school implement IGE, when the school discontinued its IGE program, and if there still were teachers on the staff from the IGE period who would be willing to participate in the study. This screening process narrowed the population to a final group of 8 schools.

Significance and Limitation of the Study

While this study is necessarily limited by the small number of schools studied and research findings relate only to those schools, a contribution can be made to the larger body of knowledge concerning factors relating to the failure of educational innovations to survive. Since few research studies have dealt with the variables leading to the abandonment of IGE, a contribution can also be made toward further research in this domain.

Educators have long been criticized by the public for quickly adopting and just as quickly dropping a variety of educational innovations. By being aware of the complexity of factors that hinder change and make the incorporation of some innovations into the school organization impossible from the onset, the necessary steps can be taken initially toward preparing a receptive environment for the change.

Overview of the Remaining Chapters

Chapter I presented an introduction to the study, an overview of the development of IGE, its seven components, and implementation activities. Research relating to the institutionalization of IGE was cited. The rationale, limitations, and significance of the study were also discussed.

The following chapters will deal with a review of the related literature on change and innovations, the methodology and design of the study, the presentation and analysis of the data from the respondents, and a summary of the findings and conclusions relative to the research questions and implications for school practice and recommendations for effecting change and implementing educational innovations.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

In Chapter I, studies conducted for the purpose of verifying whether change and educational innovations had actually improved the learning climate in schools were reviewed. The findings of the studies indicated that the hoped for gains did not take place and few educational benefits accrued. The educational enterprise was criticized for not evaluating thoroughly the impact of organizational change and new programs on its subsystems. The review of the literature in Chapter II provides some clues concerning the barriers which may prevent the effective initiation of change and successful implementation of innovations. In addition, some strategies and processes of change are presented to provide a conceptual framework for studying the variables which may have prevented some schools from effectively institutionalizing the complex educational innovation, IGE.

The literature reveals that the strategies and processes of change did not receive much recognition in the field of education until the 1960's when the "space race" prompted the push for more scientific and technical training. Laboratories and research centers were established with federal grants for developing new products and programs to provide the needed training. This also provided the impetus for the government to legislate additional funds for schools and

school districts to purchase new materials and programs. It was faddish for school districts to have a number of innovations operating simultaneously in the schools. It was evident that strategies were necessary to successfully disseminate the products and programs. The number of strategies for instituting change gained appreciably in the late 1960's.

During the 1970's, strategies for instituting change and implementing innovations were augmented and refined. In response to the "back to the basics" movement and the reduction of federal monies, many school districts drastically cut back or eliminated their innovative programs. However, change had already taken place in the schools. Now it is evident that the emphasis would have to be on quality training and products. A discussion of the literature of the last two decades provides an overview of the strategies of change and the implementation of innovations.

Barriers to the Initiation of Change

The barriers that often exist in initiating change have been described by Woods and others (1967, pp. 34-41) as: (1) a lack of incentives or rewards to change the organization; (2) the bureaucratical administration of schools with teachers serving as functionaries under hierarchical supervision; (3) a weak knowledge base where it is assumed that the change is good and that there is interaction among teachers, researchers, and publishers; and (4) the absence of a change agent to provide strategies and evaluation. When change is thrust upon

those who are responsible for carrying it out, expected gains may never be realized. Only when those who are involved in facilitating the change have input in the decision, and are supplied with all the options, will success be possible (Gores 1968, p. 74).

In planning change in schools, Giacquinta (1975, pp. 102-114) postulated that the process was difficult to effect. One must consider that a school is a complex organization with a defined set of positions or statuses with their related norms and expectations. When change is generated for the introduction of an innovation, an element of risk is present and one's status is challenged. Members begin to question the effect of the risk involvement on their prerequisites. He suggested that a status-risk perspective, where uncertainty and imagined risks are reduced through an understanding by management of the innovation and its ramifications, enhanced the chance for change to be effected. In school personnel, the degrees of receptivity and resistence during initiation and implementation of innovations are of importance but they are not the only variables influencing educational change.

Change has also been characterized as a normative-re-educative process of people (Chin & Benne 1976, p. 42). In the process, the individual learns to conduct himself/herself in new ways. This is brought about through acquiring new knowledge, new skills, new attitudes, and new value orientations. At the social level, the new conduct may mean a change in norms, roles, and the structural relationship of the institutions that are involved.

From findings of six case studies of schools receiving federal

aid to improve learning and teaching, Gross (1976, pp. 10-12) concluded that some concepts had been ignored in the educational change process. He identified certain factors that were not usually identified or dealt with as change barriers.

1. The opposition of the staff to the innovation after it was introduced into the organization.
2. The lack of consideration given to new skills and roles required of the staff when installing innovations.
3. The failure of the management to provide the essential services and materials needed by the staff in the change process.
4. The lack of recognition of the conflicts that arose between the innovation and other aspects of the school program.
5. The failure of the management to recognize the need for strong support and protection from the central administration and the school board during all phases of the change process.
6. The imposition of district constraints on consultants and administrators of schools where change was taking place.
7. The misunderstandings and conflicts which developed among school officials and governmental agencies.

He concluded that during the change process the need to establish regular procedures to monitor the dynamics of the process was generally ignored by those who had initiated the change.

Wrong assumptions about initiating organizational change often arise when managers of change draw the wrong conclusions while they are seeking to bring about the change successfully (Zaltman, Florio, &

Sikorski 1977). A rationalistic bias results when the manager or change planner feels that all that must be done to generate change is to present knowledge and information. Some thought must be given to providing a rationale that will fit the client's thinking. Poorly defined goals can lead to failure to evaluate a change in terms of its effectiveness toward accomplishing the client's goals. There is need to take into consideration the interpersonal environment. Finally, a technocratic bias results when there is an over-emphasis on developing the change program while failing to formulate an accompanying plan for implementation within the organization.

It is one thing to force change and another to have participants sense when change is needed. An "outside-in" perspective provides a limited view. One must view the school organization as a whole with its subsystem and its environmental resources and constraints. The initiation and implementation of change must take place inside the organization. In the process, a successful change may be thought of as a failure because there was no significant change in student learning, problem reduction, or conflict resolution. Those evaluating change must determine whether they are evaluating the results of implementing change or whether they are evaluating the ability of an organization to function differently and more effectively. When resources, constraints, and resistance to planned organizational change are identified and clarified, there is likelihood of formulating successful change strategies (Zaltman et al. 1977, p. 326).

The Center for New Schools, in a recent study of six assistance

groups who provided help to change some local schools, identified patterns in implementing the educational change process (Moore, Schepers, Holmes, & Blair 1977, pp. 24-26). They found:

1. The most effective criteria for evaluating educational change efforts is the effectiveness of a given strategy in altering the social structure, school community and its environment in some intended way.

2. Within the school, the principal influences a wide variety of change strategies and he/she can block change or initiate it.

3. There is a need to develop a wide variety of change strategies to meet a variety of local conditions.

4. Strongly held value commitments were at the heart of educational change.

5. The time frame for lasting change efforts was observed to be three to four years.

After studying the successes and failures of schools which attempted to implement the multiunit school structure, Schmuck and others (1975, p. 4) felt that fundamental changes in the school organization should precede changes in the school's instructional procedures. They reasoned that too much emphasis had been placed on innovations involving curriculum or instructional techniques. Little attention had been given to those changes in the organizational features of the school that supported or impeded an innovation. It was their hope that schools would try formulating new organizational patterns while they tested and evaluated instructional innovations.

There is agreement by some that the change process has been

viewed too simplistically when it is thought of as just overcoming an individual's initial resistance to change (Gross, Giaquinta, & Bernstein 1970, p. 73). One must consider that those who are not resistant to change initially may encounter obstacles as they attempt to initiate change. As they encounter frustration and obstacles, the initial support may be lost. One must decide whether the new practices will help solve existing problems, be adaptable to their teaching style, and will they have administrative support if he or she implements change. In their attempt to relieve frustration and to overcome obstacles, advocates of change may develop a negative orientation and consequently become resistant to the change. Giaquinta and others (1975, p. 104) felt that a totally successful planned change in a school resulted from a process that began with a discussion about a school problem and a decision that changing the behavior of the staff in the process was required.

Some think that an open-system type of organization is more responsive to change, since within the system the development of people is paramount. There is a commitment by individuals to self-examination in the change process. The focus is on the uniqueness of the individual to change in his/her own unique way. This system reflects the involvement and input of many in the change process rather than one or a few. Therefore, change is produced by experiences of people producing new understandings, new perceptions, and new skills (Foster 1968, pp. 290-291).

Kaye (1976) also characterized an effective open system as

having the goals of individuals, components, and subsystems in congruence. Between individuals and the system, the norms and values are made explicit. The roles, functions and structure remain flexible, based on the needs of administrators, implementors, and consumers. Power, authority, and influence are shared among the components and both formal and informal linkages are utilized for communication. Thus, the open system sees change as a means to maintain and perpetuate itself.

An awareness of those elements which bring about resistance to change increases the possibility for successful change to occur. According to Watson (1967), resistance will be less if:

1. Those involved in change feel that it is of their own doing and not imposed by outsiders.

2. The top administration clearly supports the change.

3. Participants see change bringing about a reduction not an increase in their burdens.

4. Participants feel that their values and ideals are in accord with change philosophy.

5. The change affords a new kind of experience that interests participants.

6. The autonomy and security of the participants is not threatened.

7. The participants have cooperatively diagnosed efforts in defining and seeing the importance of the basic problem.

8. The change effort is supported by a consensual group decision.

9. The proponents recognize and acknowledge the fears of opponents.

10. The participants recognize the need for clarification and feedback when installing an innovation.

11. The change effort is kept open for revision and reconsideration if necessary.

When initiating change, both individuals and organizations are involved. There must be a commitment of time and energy. Successful change is brought about through adequate planning, implementation, and evaluation.

Barriers to the Implementation of Innovations

Any innovative program must be better than the one it replaced; sufficiently popular so that its absence is regarded as a sign of decadence, rigidity, or both; and must enhance the image of the school as a progressive institution (Rubin 1968, p. 158). When judging the replacement program, one should determine if it is just a fad or constitutes a fundamental change by furthering the basic goals of individualized learning, professional teaching and refinement of curricular content. It should be viewed and evaluated with different techniques in terms of the basic goals as set forth. Such an innovation requires different roles, behaviors, and methods from teachers and students in the school organization (Trump 1968, p. 46).

In a study to examine teachers' attitudes toward adopting innovations, Chambliss (1968) thought that discontent should first be

created concerning the status quo. If participants felt discontented they would then accept the innovation as appropriate and needed by the institution. From examining the responses of 197 subjects on an Innovation Scale, he found the following generalizations:

1. Principals exert the most influence concerning adopting innovations.

2. Money alone cannot achieve change.

3. If teachers and administrators feel the need for change, they are willing to make changes and to implement innovations.

4. Teachers are in a better position than parents to evaluate innovations.

Installing an innovation involves retraining of personnel, the diagnosis of the school's weaknesses to ascertain whether the innovation is really what the school needs, and redefining the role of the principal and teachers to facilitate mutual decision making in the change process (Lipham & Fruth 1976, p. 5). Pincus (1974) believed that schools tend to adopt innovations which would be considered progressive, efficient, professional, or sensitive to community needs. They decline to adopt those innovations which altered the basic purpose or organization of the school. The decision to adopt is markedly influenced by the bureaucratic structure and incentives of schools. Gains in a school may never be realized if an innovation is thrust upon the staff.

The kind of change and discrepancies in the rate of adoption and diffusion of an innovation have been explained by some. It is felt

that the rate is influenced by the characteristics of the innovation. Rogers (1965, p. 124) defined the characteristics to be the relative advantage of the innovation over the present ideas, its compatibility with existing values and past experiences of adopters, the complexity of difficulty for utilization, the divisibility of innovating on a limited basis, and the communicability of the innovation's success as related to others. The rate of adoption could also depend on the characteristics of the adopting unit (individual and/or group), the communication linkage of the unit with sources of information, and the position the adopting unit holds in relation to the other similar units (Carlson 1965, p. 5).

In reviewing the use of a Catalytic Role Model in one school, Gross and others (1971, p. 122) summarized the failure to implement an innovation. Their findings indicated that (1) teachers lacked clarity about the innovation, (2) they lacked the skills and knowledge needed to conform to new role models, (3) the required instructional materials were not available, (4) there was incompatibility of organizational arrangements with the innovation, and (5) the staff lacked the motivation to succeed. Further, they found that the administration failed to anticipate difficulties which teachers probably would encounter. They made no provision for feedback mechanisms to identify and cope with barriers and problems during the implementation.

Studies spanning two decades that dealt with the adaptability of school systems in adopting innovations indicated that one must be aware that innovations spread slowly through school systems (Mort

1964). The diffusion rate of complex and simple innovations appears to be the same. However, any innovation that is costly to the school district diffuses at a much slower rate. During the slow early period of the spread of an innovation, the innovation receives little recognition. Any innovation that seems to spread at a very slow pace may well be questioned with respect to its structure, purpose, and validity. To make a valid assessment of an innovation requires an examination of the effect of the innovation on the entire system.

The Gross (1976) study showed that school districts which did not engage in a careful diagnosis of organizational problems before introducing innovations failed to implement them. Those districts which introduced projects in a fragmented or piecemeal manner showed no evidence of concern as to whether the project would benefit students. There was a lack of knowledge on the part of the administrators that when they borrowed or adapted innovations from another district, it might not work in their district. There were attempts to install innovations that lacked operational procedures or guidelines. Inadequate planning brought forth the failure of the administration to realize that the way an innovation was introduced to the faculty may be critical in their initial and later reactions to implementing the innovation.

According to Walker (1976, pp. 46-47), some innovations have never been fully implemented because of their limitations or their incompatibility with program objectives. Diffusion using improper strategies or misjudgment of staff acceptance also contributed to failure. The human element often played a dominant role in the acceptance or

rejection of innovations. If there existed a reduction in the ego satisfaction of teachers, the innovation was not likely to be accepted. The innovation also dichotomized the staff into groups of those who accepted the innovation and those who did not. There was some evidence that some staff felt that they must adopt the innovation lest they might jeopardize their economic status and security. For the innovation to be acceptable, it must not disrupt the system but should be a "smooth fit" into the present structure.

The external or community environment according to Shane (1973) can also contribute to the failure of innovations. He noted the lack of public support for educators' goals, the lack of public or institutional commitment after federal and other external funding is gone, and the absence of support for increases in local school taxes to support innovations. He felt that there was a resentment of "blue collar workers" toward supporting "free loaders" because they did not have the same opportunities when they were in school. A mistrust of contemporary educational methods and a growing social and political conservatism supporting the status quo seems to prevail.

Factors in the internal environment that contributed to the failure of new programs were cited by Shane (1973) as the insecurity sometimes brought about by changes in roles, the increase in teacher load, and the lack of sustained top-level leadership. Personnel who were disgruntled and disturbed by the programs because of resistance to change or dissent caused by unsuccessful past ventures further nullified attempts to implement innovations successfully.

Reference has been made to the lack of sustained leadership when attempting to implement innovations. Typically, enthusiasm for innovation is initiated by the leader and the momentum builds (Fruth et al. 1977, p. 286). The leader assumes that all is going well and channels his/her energies in other directions. The interest by the staff in continuing the innovation wavers, the leader fails to reactivate the problem-solving environment, and the innovation fails. If the administration will support new practices, teachers will try them if it will help solve problems important to them and their students, are easily adaptable to their own style of teaching, and do not demand a great investment of time or energy (Chesler, Schmuck, & Lippitt 1963, pp. 269-272).

The focus in studying the failure of innovations has been on the adoption process as the most critical in the change process. At least as significant is the implementation of the innovation (Pellegrin 1975, p. 92). The decision to adopt an innovation is usually a simple matter compared to the complexity of the problems associated with implementation. A study made of the innovation, differentiated staffing, yielded little in the way of factors that would facilitate the implementation process. The most crucial problems relating to the implementation process which surfaced were the Problem-Inducing Assumptions. According to Pellegrin (1975, pp. 95-99), these were matters that were taken for granted by those directing the planning and implementing phases:

1. Alternative of Grandeur - The innovation was the solution for a very large proportion of existing problems.

2. Goals and Behavior - The educational benefits were to be realized from changes rather than the nature of the changes themselves.

3. Virtue and Dedication - It was assumed that dedication to values and objectives made for success.

4. Change by Decree - It was announced that structural changes had gone into effect at the beginning of the school year.

5. Division of Labor - Teachers and administrators are rarely able to devise new patterns of work behavior for themselves that depart drastically from their customary practices.

6. Administrative Support and Coordination - The innovation was superimposed on the existing administrative structure rather than made a part of it.

7. Authority and Decentralization - Those directing the project must have authority and participants should play a major role in decision making.

8. Values and Norms - Values and norms in conflict with an innovation can be modified only if conditions are changed so that new behaviors are rewarded highly.

9. Inservice Training - The training needs to be relevant to innovations to help define the nature and objectives of the innovation.

10. Local Uniqueness - It was assumed that each district had its own unique problems but found them to be only variations in ethnic, economic, and other nationally common factors.

An innovation must amount to more than a mere organizational manipulation. Howard (1968, p. 194) stated:

> It must involve a change in what teachers do when they teach, what students do when they learn, and what they both do when they interact with one another.

One must understand the innovative process, the nature of the innovation, the adapting systems, and the nature of the agents carrying out the innovation before one can successfully institutionalize educational innovations (Guba 1968).

Strategies and Process for Change

There exists no general theory of planned educational change but a diversity of concepts and perspectives have been developed (Miles 1967). The variables which are involved are numerous and complex. They can relate to individual and group perceptions and they may be altered by any of several change strategies originating within or external to the organization (Hilfiker 1971, p. 39). To provide a conceptual framework for the present study, some of the strategies and processes of change will be described.

Social Interaction. This strategy evolved from sociology as a means to implement the adoption by farmers of new agricultural products, principally hybrid seed corn (Ryan & Gross 1943). The adopter was part of a network of social relations which influenced one's behavior and provided for the communication of ideas about an innovation between individuals or between groups. The influentials in the acceptance of change were peers and opinion leaders within the group. Havelock (1973, p. 18) felt that the position of the individual within

the network and within a subgroup was a good indicator of how quickly an innovation would be accepted. The focus, then, is on the user and his/her environment and not on the entire social system.

The assumption is made in the Social Interaction strategy that the innovation has already been created, developed and partially diffused and is awaiting adoption by the user. The five stages in the adoption process in relation to the user were:

1. Awareness of an innovation which may create a need for the innovation.
2. Interest in the innovation which results in actively seeking information concerning its utility.
3. Evaluation of the innovation by judging its efficacy vis-a-vis the present status of the system.
4. Trial of the innovation which involves implementation on a small scale.
5. Adoption of the innovation which results in its continued use. (Rogers, 1962, pp. 81-84)

Gross (et al. 1971, p. 21) added a sixth step, that of discontinuance of the innovation, if the evaluation does not please the adopter.

Later, Rogers (Rogers & Shoemaker 1971, p. 103) in response to findings of other studies revised his original five stages. He then included (1) knowledge of the innovation, (2) persuasion leading to forming an attitude about the innovation, (3) a decision about adopting or rejecting the innovation, and (4) confirmation from peers that the decision was a good one. In the literature, one finds the stages

of adoption for this strategy with slightly different labels and different activities but with the same intent and purposes.

In Carlson's (1965, pp. 6-27) study of school systems, he found that the leadership of the administrator, the social structure, the interpersonal interaction, and the flow of communication to be of importance in the adoption of an innovation. He also found that opinion leaders possessed high social status, were greatly involved in interpersonal interaction, were instrumental in controlling the flow of communications and were the influentials in the acceptance of innovations.

The school as an adopting unit is a member of a large social network. In accepting an innovation, the school must demonstrate to this network that the innovation improves the status quo. House and others (1972, p. 12) believed that the social interaction of the network within the school made possible the institutionalization of an innovation through the interchange of information between the potential users of the innovations during the adoption stages. The most important variables in this strategy in relation to the school are those that describe the formal and informal structural arrangement of the school and those which describe the kinds of actions utilized by the influentials to improve and change teachers' attitudes and feelings toward innovations (Chin 1963, pp. 48-50).

The essential features derived from the Social Interaction strategy are:

1. The importance of the social relations network.
2. The user's position in that network.
3. The significance of the informal personal relationships and contacts.
4. The importance of the reference group identification.
5. The essential irrelevance of the size of the adopting unit.
6. The differential significance of the different types of influence strategies at different stages in the adoption process. (Havelock et al. 1969, chap. 11, p. 7)

Thus, this strategy delineates the adoption stages prior to the decision to adopt or reject the innovation and the interaction of individuals within a social system through communication linkages that exist between the formal and informal organization existing within the social system.

Problem Solving. The process of change in this strategy originates within the client who identifies a need for change and undertakes to diagnose and develop a solution to the needed change. Within this strategy, outsiders are not usually the initiators of change but serve in a two-way reciprocal or collaborative manner with the client (Havelock 1969). Models in this strategy evolved from Lewin's (1947) process of change which was influenced by Barnard's decision-making model. The three steps in this process included (1) unfreezing the client system to acknowledge that a problem existed and that change was needed, (2) moving the client system toward implementing the

change, and (3) freezing the client system to firmly establish the change.

As a result of their studies of change agents and client systems, Watson and Westley (1958) expanded Lewin's strategy to include seven phases: (1) developing a need for change, (2) establishing and defining a change relationship, (3) identifying and clarifying the problem, (4) examining alternative goals and establishing plans of action, (5) transforming plans into change efforts, (6) generalizing and stabilizing the change, and (7) achieving a terminal relationship. Phase 2, they felt, could spell success or failure to any change project, depending upon how effective the relationship was between the client system and the change agent. The institutionalization of a change would occur at Phase 6, if the momentum of the system had attained a "certain state of equilibrium." Although the relationship of the change agent and the client system could be terminated at any phase, it was their feeling that for successful change it was best to terminate the interaction after the change had "stabilized."

With educational systems in mind, Thelen (1967) extended the model beyond the stabilization of the client system. His strategy involved a cyclical pattern where the system was not static but was engaged in a continuous cycle of generating, diagnosing, and solving problems. The change relationshi that he advocated was a "collaborative action-inquiry" between practitioner-clients and researcher-change agents. He utilized Lewin's "force field analysis" taking into account all forces which act on the client system, all forces which

might inhibit or facilitate the adoption of an innovation, and the forces which the innovation itself may exert on the system. For innovations to be a genuine change and to be considered as institutionalized, he felt that they must become an indispensable part of the existing system.

A change project for planning a strategy for the self-renewal of school systems was developed by the New York Region Cooperative Project for Educational Development (Miles & Lake 1967). Through a collaborative effort by the client system and the change agent (COPED) teams, the client system learned to facilitate its own problem-solving strategy of change. The team's function was not to implement innovations within the school but to assist schools in developing an understanding of the process of change and how to become self-renewing. All members of the system who would be affected by the change participated in temporary systems before the change was introduced. Institutionalization, as conceptualized by the project, did not mean that the system was in equilibrium after adoption. It did mean that the system was able to formulate structures and procedures for institutionalization and could perpetuate the self-renewing process.

Jung and Lippitt (1966) designed a six-phase problem-solving model: (1) identifying the problem, (2) diagnosing the problem, (3) retrieving related knowledge and discussing implications for overcoming the problem, (4) forming alternatives to action, (5) testing the feasibility of alternatives, and (6) adopting and implementing the selected alternatives. They also contributed a description of the

techniques used to link the resources of experts to the client system in order to ensure the utilization of scientific knowledge. Henrie and Bailey (1968) also elaborated on Barnard's model and labeled their phases: (1) clarifying the goals, (2) defining the objectives, (3) defining the mission, (4) analyzing the tasks, (5) establishing the management system, and (6) setting up the evaluation mechanisms. The techniques thus described employed the retrieval of relevant knowledge and the derivation of the implications from that knowledge.

A series of activities that a user goes through to satisfy a need were proposed by Havelock (1969, chap. 9, p. 36). He classified them as (1) translation of the need into a problem statement, (2) diagnosis of the problem, (3) search and retrieval of information to be used in selecting an innovation, (4) adaption of the innovation to his/her own situation, (5) trial of the innovation, and (6) evaluation of the effectiveness of the trial to satisfy the original need.

The motivation of the individual toward change can be brought about through a feeling of dissatisfaction toward the existing situation, the perceived discrepancy between what is and what might be the external pressures on the client system to change its behavior, and the forces within the system desiring greater productivity or more efficient problem solving (Lippitt et al. 1958). The self-initiation and the self-application of the problem-solving process by the client creates a receptive motivational climate for the survival of an innovation.

Research, Development and Diffusion (R, D, and D). This change

process is viewed at the research stage and does not focus on the client's needs as does the problem-solving strategy. The various R, D, and D models depict change as an orderly process to identify a problem, develop activities directed toward finding or producing a solution to the problem, and the diffusion of a solution to the target group (Havelock et al. 1969, chap. 10, p. 39). The emphasis is on the predetermined solution of problems presumedly based on client/receiver need and the closing of the gap between theory and practice. Therefore, the focus on change is from the point of view of the developer of the innovation and the user is viewed as essentially passive.

A study of instructional innovations requiring a structural rearrangement in some schools in the New York State school system prompted Brickell (1964) to devise a three-phase process for instructional innovation. In stating the three "distinctly different, irreconcilable processes," Brickell (1964, p. 497) also included the ideal working conditions:

1. Design is a translation of what is known about learning into programs of teaching. The ideal conditions are artificially created, enriched and free.

2. Evaluation is the testing of new instructional approaches to find what it will accomplish under what conditions. The ideal conditions are controlled, closely observed and unfree.

3. Dissemination is the process of spreading innovations into the schools through multiple activities. The ideal conditions are ordinary, unenriched and normal.

Ideally, he felt that to link innovation development to the utilization in local school systems, there should be some means for school systems to inform developers and designers of their needs. In return, a means should be provided for systems to provide feedback to developers and designers to verify that the needs have been met.

While no one model is considered the R, D, and D model for change, a model devised by Guba and Clark (Guba 1965) seems to include the generally accepted phases of this strategy:

1. Research
   The process necessary to advance or extend knowledge.

2. Development
   The process includes invention which formulates a solution and an action problem and design which packages the solution or innovation for use.

3. Diffusion
   The process which includes dissemination for informing or creating awareness about the innovation and demonstration for presenting its utility.

4. Adoption
   The process of trial for trying out and testing the innovation, installation for fitting the innovation to the institution, and institutionalization for assimilating and accepting the innovation into the system.

The statement of phases and the definition of activities at each phase provide a framework for planning the change process in an orderly way. The framework also provides continuity and avoids overlapping and gaps in activities and the roles and functions of individuals and institutions involved in the process may be planned in advance (Havelock 1969, chap. 10, pp. 42-43).

While Heathers' (1967) strategy for innovation in the elementary schools was grounded on strategies influencing change, he felt that innovations should proceed through certain phases. He termed his phases Task Analysis, Development of a Design, Construction and Testing of Prototype Models in Field Situations or Laboratories, Dissemination of the Innovation. His strategy differs from that of Brickell since the purposes of the innovation and the requirements for achieving the purposes are stated at the first stage, Task Analysis.

The major assumptions Havelock (1969, chap. 11, p. 5) felt that made the R, D, and D strategy so powerful were (1) a rational sequence in developing and implementing an innovation, (2) long-term intensive planning, (3) division and organization of labor to fit sequential planning, (4) a more passive but rationally oriented consumer or client ready to accept and adopt the innovation, and (5) high initial cost offset by the anticipated long-term benefits. In addition, the major emphases of the R, D, and D theorists were the planning of change on a large scale which involved specific development based on knowledge, precise testing and evaluation of an innovation to fit a particular need, and the means to distribute and install an innovation in a client system.

Thomas (1975, p. 106) advocated the abandonment of the Guba and Clark model because he felt that there was no need for any research and development model in relation to educational innovations. He did not believe that strengthening the communication link between and among agencies in the R & D community would promote higher quality innovations

in the schools since few concepts generalized easily from one setting to another. He pointed out that teachers and school districts could and do develop innovations without the assistance from research and development.

The educational innovation, IGE, described in this study was developed following the Research, Development, and Diffusion model. The strategies for implementing IGE which were discussed in Chapter I evolved from the Diffusion phase of the model. The relationship of this strategy to the failure of some IGE schools to institutionalize the innovation will be discussed in Chapter V.

Linkage Strategy. The linkage concept utilizing elements from change strategies previously discussed links sources of knowledge with the users of knowledge and facilitates the interorganizational communication between the user and the developer. On the completion of a project to understand and improve the dissemination and utilization of new knowledge, Havelock et al. (1969, chap. 11, p. 4) realized the need to bring together the three major categories of dissemination and utilization. The linkage model that was devised incorporated the major features of the other models and served to unify and integrate the most important ideas. The phases of the model were: (1) problem solving where new knowledge relevant to the user's needs was sought and retrieved; (2) research in which researchers carried on the processes of research, development, and the dissemination of findings; (3) social interaction which established relationships and a communication system among the researcher, developer, practitioner, and consumer; and

(4) linkage which provided the user with the awareness of resources available within the organization and the role of others in the dissemination and utilization process.

Seven categories were identified by Havelock et al. (1969) as the "general factors" in knowledge dissemination and utilization. They surfaced in the project's research of the three change strategies. In summary they were:

1. Linkage
   The degree of interrelated communication between consumers and users.

2. Structure
   The amount of systematic organization and coordination within the research and utilization strategy.

3. Openness
   The willingness to accept and to give help when considering change.

4. Capacity
   The utilization of a diversity of resources including power, money, and existing linkages.

5. Reward
   The plan and structure for granting positive reinforcement.

6. Proximity
   The elements indicating physical accessibility.

7. Synergy
   The combined forces at work to make possible the adoption of an innovation.

The starting point for this strategy is the problem-solving process with the user. The outside resource person or system must be able to reiterate or simulate the user's feelings. The user, in turn, must

be cognizant of how the resource system operates. What evolves is mutual reinforcement and reciprocal feedback or mutual collaboration between users and the resource person or system. Such linkage between the systems is essential to implement a planned social change.

While there exists little empirical and descriptive research for verifying the linkage concept as developed (Lipham & Fruth 1976), this strategy does provide a means to disseminate information to the user about resources available within and without the organization for the acceptance of an innovation. Havelock (1970) felt that because of its eclectic approach where ideas are unified and integrated, this model had the best potential for institutionalizing an innovation.

Organizational Development (OD). This process is viewed as a planned and systematic problem-solving process which applies behavioral science research findings, other change models, and statistical techniques to improving the system (Schmuck & Miles 1971, p. 3). In this context, the school organization is a system and an innovation is thought of as a change in the organization of the school. The OD process is usually directed by external consultants utilizing planned intervention strategies to train school staff to deal with their own organizational problems. Thus, the training focuses on relationships which exist within and between the organization's subsystems and the development of goals that are compatible to the needs and orientation of these subsystems.

The OD model regards the organization of the school as a living system which is goal-directed and which displays varying degrees of

openness and communication. The system consists of components which are further organized into subsystems. The system is also regarded as containing many resources and plans that at any one time are not being utilized (Schmuck, Runkel, Saturan, Martell, & Derr, 1972, pp. 2-3). Ideally, through OD training, the system will improve its capacity to adjust to meet a variety of environmental changes by:

1. Improving the ability of the subsystem of a school district to improve or change themselves.
2. Increasing the receptiveness of responsiveness of school organizations to their environment.
3. Developing the capability of receiving valid information, acting on it, and using their own resources to do things in a new way.
4. Developing an open organization with decisions made by those individuals with information, with sensing and evaluation mechanisms, and with open communication and contact between organization members.
5. Helping subsystems work out goals so that they are compatible with needs or orientations of others.
6. Improving the use of internal and external resources to augment the communication of ideas. (Schmuck et al. 1972, pp. 3-8)

The intervention strategies instigated by external consultants assist the organization in developing its potential for adapting to change. Change, as such, does not necessarily lead to a state of adaptability or self-renewal. However, an adaptable system will have the capability of measuring and evaluating its progress toward meeting both long-range and short-range goals. It will have the capacity to

sense when change is needed and it can deal effectively with changes in the environment while sustaining an effective educational program (Schmuck et al. 1972, p. 18).

The process improves the problem-solving ability of the individual within the system. It also facilitates the perception of changes in roles, in the authority structure, in the division of labor, and in the goals of the organization.

> It is an educational process which strives to develop self-renewing, self-correcting human systems. These systems are composed of people who learn to organize themselves in a variety of ways according to the nature of their tasks, and who continue to expand the choices available to the organization as it copes with the changing requirements of a changing environment. (Schmuck et al. 1975, p. 10)

Theorists in reviewing the OD model have concluded that it fosters a more open, trusting, collaborative, self-anticipating organization where individuals take more risks and use more imaginative approaches to the resolution of organizational problems (Stewart 1973, p. 20).

Proactive/Interactive Change Model (P/ICM). Based on the rational-empirical strategy for organizational change as described by Chin and Benne, this model was developed to provide for the purposive interaction of the educational system and the environment when internally initiating change (Zaltman et al. 1977, p. 127). The design serves not only as a problem-solving model but also as a continuous development and renewal process for the organization. The implementation of planned change comes about through improved communications linking the

system and the environment, utilizing available resources, and lowering the participants' resistance to change.

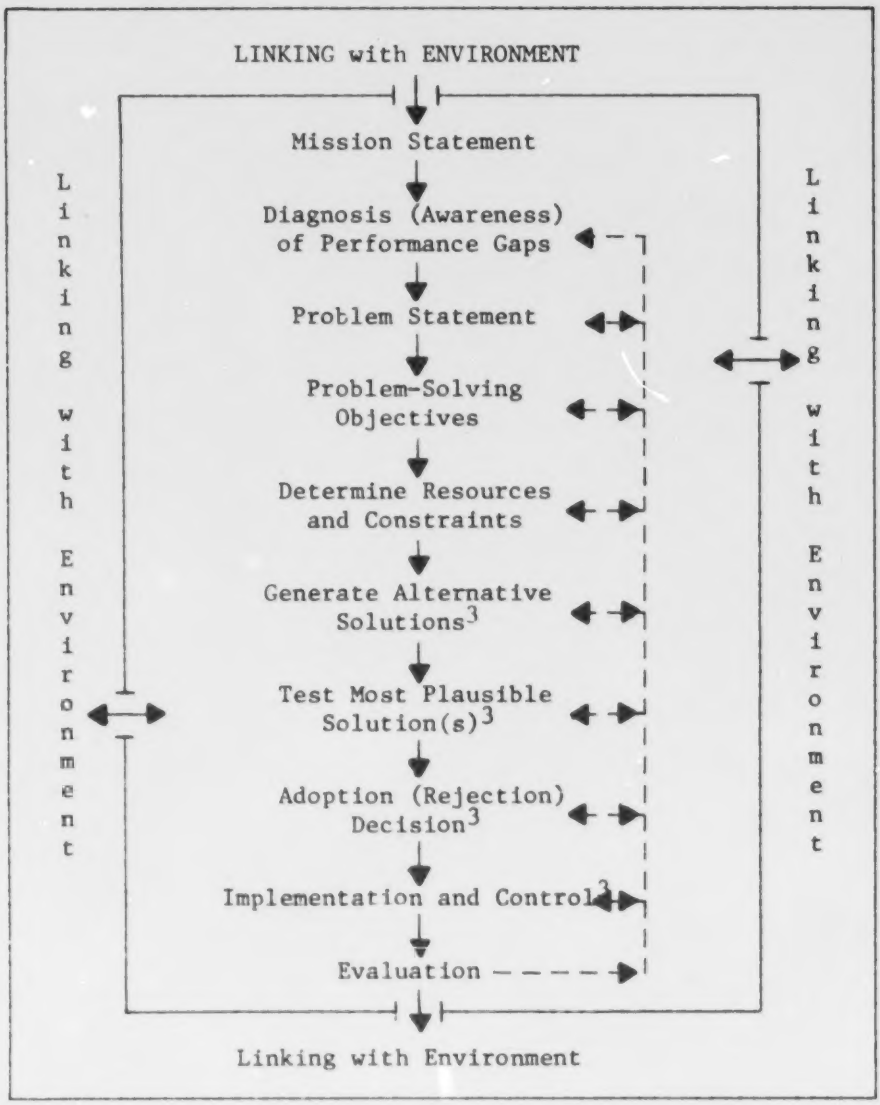
P/ICM is not a description of how change occurs in a school system. The model provides a conceptual planning framework, primarily prescriptive, when internally initiating change. Zaltman et al. (1977, p. 126) characterized the model as:

1. Reactive relationships, in which the system continually responds to external forces. Schools as open systems are often characterized as having reactive relationships with environmental entities.

2. Proactive relationships, in which the system takes the lead in initiating changes and development through innovation and actively seeking needed external resources, energy, and knowledge.

3. Interactive relationships, in which growth, development and change come about in a system through dynamic interchange on a collaborative or synergistic basis between the system and the environment.

Within the model (Figure 2.1) there is provision for broad representation in planning change, discretion and flexibility in decision making, and increased awareness of the organizational structure and the variables associated with the change system. The manager, planner, or change agent actively seeks constructive contact with the environmental forces and resources which promote feedback and allow for recycling at any stage. Zaltman felt that with the multiple client-structure within the system there was a great potential for diversity in decision making. The assumption was that change could be made through internal forces and educational systems could be self-renewing.



1. Dotted lines represent potential direct feedback and recycling from any one stage to any other stage.
2. Need assessment is a particularly relevant input for this stage.
3. Turnkey phases.

Figure 2.1 The Proactive/Interactive Change Model

Source: G. Zaltman, D.H. Florio, and L.A. Sikorski. Educational Change. New York: Free Press, 1977, p. 141.

The model was fashioned after the work of Rogers, Havelock, Glaser, Argyris, and Guba and Clark utilizing the knowledge, process, and use process from the social systems theory. The individual needs dispositions are provided for with the problem-solving systems process.

> The critical concepts for the P/IC model are the open system, the flexibility, the system/environment linking, the informed/collaborative decision making, the unconstrained human interaction, and the multidirectional communications flow. (Zaltman et al. 1977, p. 181)

In this strategy, therefore, change is initiated through the collaborative efforts of the organization members and between individuals in the organization and its environment.

In reviewing IGE as a complex educational innovation, the researcher determined that it was not possible to view one change strategy as the model for the conceptual framework for this study. In reviewing the six strategies or processes, each one embodied some concepts that the researcher thought should be present when considering, adopting, and implementing IGE. The researcher merged a number of years of experience as a classroom teacher in a traditional school, as a specialist in an IGE school, and in observing and working with IGE schools to find that the theoretical and empirical concepts began to merge to form an eclectic and practical orientation to the problem. After years of dealing with the complexities of organizations and people, the researcher has reason to believe that the most successful

strategy for change involves perceiving the needs of people as they interact within and with their environment. However, one always hopes that the research undertaken will lead to the development of the ideal model for institutionalizing an innovation.

Summary of the Chapter

In the chapter, the terms "change" and "innovation" were defined and some barriers to the initiation of change and the implementation of innovations were described. Six strategies or processes of change were reviewed to possibly provide a conceptual framework for the study.

The barriers to initiating change can be categorized as the lack of planning for awareness and implementation, failure to consider how the individual will be affected, lack of intraorganizational support, and no assessment of individual, organizational or community needs.

The barriers to the implementation of innovations center around the lack of communication among systems, the incompatability with program objectives, personal risk taking, lack of support by the leadership, and little knowledge about the innovation by perspective clients.

The Social Interaction strategy is concerned with the interaction of the individual within his/her environment. The acceptance or rejection of an innovation is governed by the individual's interaction with the formal and informal organization within the social system. In this strategy, the innovation is already created and is awaiting acceptance by the client.

In the Problem-Solving process, the individual identifies the need for change and attempts to find solutions to meet the need. This is a self-renewing and self-motivating process which utilizes available knowledge with or without the assistance of an outside change agent.

The Research, Development, and Diffusion process does not focus on the client's needs since solutions to problems have been predetermined. In this process, the researcher and developer of the innovation play the key roles while the user awaits the diffusion of the innovation.

The Linkage strategy incorporates some elements of the other processes. The user's needs are considered and there is communication between the inventor of the innovation and the user. The prime purpose of this strategy is to disseminate to the user, information about all available resources for implementing innovations.

Organizational Development provides the training to help people deal with their own organizational problems. The process encourages individuals to develop their own problem-solving abilities.

The Proactive/Interactive Change Model also promotes problem solving within the individual. Change comes about through improved communications linking systems with their environment, utilizing available resources and fostering change in individuals.

CHAPTER III

METHODOLOGY AND DESIGN OF THE STUDY

This chapter opens with a brief overview of the rationale for the methodology chosen for collecting the research data for the study. The process for the selection of schools and respondents is described, as well as the development of the instruments utilized for the data collection. The methods used for analyzing the data are then presented. The chapter concludes with some limitations which are inherent in the design and methodology for this study.

Methodology Rationale

Although Van Dalen (1966, p. 15) stated, "research workers provide the structural foundations upon which practitioners build," effective research methods in education have been hampered by the lack of respect for research and researchers as exhibited by educators in the field. Some feel that this attitude is engendered by a lack of understanding and inaccurate information about scientific methods, worshiping natural science research over social science research, and not providing sufficient funds to implement changes suggested by research. Consequently, there may be a 25 (Van Dalen 1966, p. 14) to 50 year lag (Sax 1968, p. 54; Lehmann & Mehrens 1971, p. 9) in the dissemination

of scientific research to improve practices in the field.

Additionally, there exists some confusion over the role of basic and applied research in education. "Basic research is designed to add to an organized body of scientific knowledge and does not necessarily produce results of immediate practical use. Applied research is undertaken to solve an immediate practical problem and the goal of adding to scientific knowledge is secondary" (Travers 1964, p. 4). Since the development of innovative school practices stems from applied research, the use of basic research is often neglected and overlooked by those involved in improving and refining educational practices (Sax 1968, p. 33). Sax also pointed out that many innovative programs are being used in schools without sufficient empirical evidence as to how to use the programs and with what groups of students (1968, p. 34). As education begins to consider itself a science, basic research can be carried out in most areas of the curriculum and in related instructional practices. When this happens, basic research has some immediate practical use and the distinction between basic and applied research becomes blurred (Lehmann & Mehrens 1971, p. 5).

This study utilizes applied research in the collection of data for the purpose of describing conditions as they exist without the influence of the researcher. Indications of how serious and widespread the problems are and what steps can be taken to remedy them are brought to the forefront (Good 1966, p. 192). Sax (1968, p. 36) termed this type of research descriptive research. For data collection, descriptive studies make much more use of observational techniques, interviews,

and questionnaires. Such studies "...may describe likenesses and differences between variables and establish rudimentary groupings of phenomena" (Van Dalen 1966, p. 234). Variables may be classified, ordered, and data correlated to describe relationships which exist among the variables. Van Dalen (1966) stated that descriptive research does make a contribution to scientific research through "building a foundation of facts upon which explanatory hypotheses may be constructed and by checking the validity of existing theories" (p. 238).

This study was designed to identify various constraints on people and organizations which prevented the successful institutionalization of a complex educational innovation. It was felt that in analyzing various types of descriptive research, survey research techniques would be the appropriate methodology to employ for the purpose of gathering the data. Survey methods were used by educators early in the century to improve the efficiency and the effectiveness of the educational enterprise. Data were sought for the purpose of assessing the learning environment, the characteristics of the students and the educational personnel, and the nature of the learning process (Van Dalen 1966, p. 208). More recently, public opinion surveys have given educators a feel for the public's reaction to school issues. Community surveys also provide additional information about how the community feels toward educational programs and facilities.

Survey research encompasses methods and processes from the fields of psychology, sociology, anthropology, economics, political science, and statistics. With such a background, it focuses on the motivation,

attitudes, opinions, beliefs, and behavior of people. Large and small populations are studied and through "selecting and studying samples chosen from the population one can discover the relative incidence, distribution, and interrelations of the sociological and psychological variables" (Kerlinger 1973, p. 410). Such variables are derived from an individual's membership in a social group, on the one hand, and his/her opinions, attitudes, and behavior on the other. By assessing and evaluating such information from a sample, inferences can be made about a much larger population.

While Campbell and Katona (1966, p. 16) expressed the view that survey techniques should be used only when the desired information cannot be obtained more easily or less expensively, Babbie (1973) staunchly supported more utilization of the methodology. He believed:

1. Survey research is logical
   The format often permits rigorous step-by-step development and testing of logical explanations.

2. Survey research is deterministic
   Through the format of a logical model one is able to clarify cause and effect. One may go beyond independent and dependent variable correlations to examine intervening variables.

3. Survey research is general
   It is conducted for the purpose of describing a larger population from subgroups of the population. The reporting of the methodology permits replication by other researchers among samples and subgroups. The findings can be tested and retested.

4. Survey research is specific
   The researcher describes precisely how measurements have been developed and made. The superficiality and approximations involved in

> scientific research are more apparent. (pp. 45-49)

The primary objectives are to make descriptive and explanatory assertions about some populations while providing insight into the further exploration of a topic.

Trow (1967, pp. 315-375) commented that conditions have been too good in education for survey methods. Surveys have tended to be too trivial and unsophisticated and educators have not really had to cope with imperfect research conditions. The educational setting has provided subjects who were familiar and articulate with questionnaires, the conditions were well controlled for administering the questionnaire, and the subjects were easily enumerated and sampled. Thus, educators have never had to come to grips with the basic logic of scientific research.

Survey researchers gather data to test a hypothesis related to some educational problem. They use a nomothetic technique relating to a large number of persons, events, or institutions in contrast to an ideographic technique which attempts to understand behavior and attitudes of an individual (Sax 1968, p. 289). Survey research can also be a flexible technique in seeking information by exploring a variety of questions and by employing a variety of designs to accommodate different substantive needs and problems (Weisberg & Bowen 1977, p. 16). When surveys are conducted following basic research practices, "many types of data can be collected with not only tolerable but reassuring reliability" (Campbell & Katona 1966, p. 45). Babbie (1973) stated:

> Survey research will achieve scientific excellence to the extent that excellent scientists understand and use it. It will serve useful social purposes to the extent that people empowered to solve social problems understand how to use it effectively. It will serve as a moral instrument to the extent that moral people employ it wisely. (p. 372)

In order to ascertain the variables which prevented some schools from successfully institutionalizing an innovation, the interview procedure was chosen. This mode typically attains a higher response rate than mailed questionnaires since many people are more willing to respond orally than to take the time to fill in a questionnaire (Babbie 1973, p. 171; Van Dalen 1966, p. 306). It is considered a reliable and valid means to collect data if the interview schedule is thoughtfully designed and the manner and technique for administering it are systematic (Cannell & Kahn 1966, p. 328). In an interview, there are fewer partial responses and refusals to reply since the interviewer can explain the purpose and significance of the study, clarify points and answer questions concerning the study, and motivate the interviewee to respond through personal interaction.

Since in this study cost had to be taken into consideration, rather than visiting schools to conduct face-to-face interviews the researcher interviewed by telephone (Weisberg & Bowen 1977, p. 59). Kerlinger (1973, p. 414) stated that this method has little to recommend it beyond speed and cost. When the interviewer is not known by the respondent, he reasoned that there were possibilities of nonresponse, uncooperativeness, and a reluctance to answer detailed questions.

He did admit that telephone interviews could be useful in obtaining information essential to a study if one can contend with the obvious defect of the inability to obtain detailed information.

There is little in the literature about this mode of data collection. In a study to identify the most efficient methods to conduct a follow-up study of former secondary school students based on cost, rate of return, and nature of response, Krueck (1975, p. 57) found that the telephone survey method was quite effective, having a response rate of 66 percent. Further analysis of data indicated that the telephone survey method was significantly more effective than either the mailed questionnaire or personal interview methods. A community college in Oregon used the telephone interview method to conduct a comprehensive needs assessment of community opinions, attitudes, and beliefs (Moore 1976, p. 27). It was noted that in evaluating the effectiveness of this strategy, they were able to access the community base quickly and economically and that all prescribed calls were completed.

In a paper which reviewed recent literature on the use of the telephone in survey research, Reeder (1976)* suggested that there have been few studies comparing telephone and other interview techniques using a controlled experimental design. He cited three studies which indicate that there were no differences in the quality of data obtained through mailed questionnaires, telephone interviews, and personal interviews. In four other studies which compared the results of

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*Permission was obtained from Dr. Reeder by the researcher to cite his paper in this study.

telephone and personal interviews, there were essentially no differences between the two strategies. In relation to the types of questions asked, it appears that a range of topics can be successfully carried out on the telephone. The cost factor is generally recognized as being less than face-to-face interviews although research situations vary widely. In summary, Reeder identified three general issues relating to telephone surveys. The first is the lack of studies comparing household and telephone interview techniques in a controlled experimental setting. The second is the susceptibility of telephone interviews to interviewer bias and characteristics, sampling bias, nonresponse and refusals. And the third is the economics involved in collecting data by telephone.

A conference sponsored jointly by the National Center for Health Services Research and the National Center for Health Statistics in 1975 examined the methodological areas of health survey research. Among the methods studied was telephone interviewing. The major advantages they found that relate to the present study were:

1. With properly developed strategies, telephone interviews can be efficient.
2. Using the telephone, respondents can be interviewed in areas where interviewers might be hesitant to go.
3. Restrictions such as mobility and transportation are substantially lessened.
4. Field costs associated with other types of interviewing are reduced.

Other advantages in using the telephone for interviews were the cost factor and the percentage of interviews completed. Some studies have found cost savings to be substantial while others have shown only minimal savings. The percentage of interviews completed by telephone was found to vary between 60 to 80 percent in health-related studies.

Some organizations cited at the conference had attempted to limit the time of telephone interviews to 20 to 30 minutes. Other groups reported having no difficulty sustaining interviews of an hour or more. The general feeling was that there is no basis for saying that telephone interviews are shorter than personal interviews although most interviewers tend to make them shorter. There was general agreement among the conference participants that telephone survey techniques have the potential for solving some of the problems that plague personal interview procedures but more substantive evidence is needed for verification.

Selection of Schools and Respondents

In survey research studies, Van Dalen (1966, p. 207) noted that they may be narrow or broad in scope, every member or a carefully selected sample of the population can be used for gathering data, and a few selected variables or a large number of factors can be studied. The scope and depth of the study is dependent primarily on the nature of the problem. There are times when it is necessary to select deliberately certain elements of the population to be included in the study

since their responses may be crucial to the study. Campbell and Katona (1966, p. 20) believed that there exist many research problems in the social sciences for which a comparatively few individuals in the population find relevant. "Small-scale surveys of a highly localized and accessible population can...be successfully carried out by a single individual...who possesses the necessary skills and diligence" (Campbell & Katona 1966, p. 50).

It was necessary because of the nature of this study purposively to delimit a population to those cases which typified the problem under study. It was impossible to locate all schools that were unsuccessful in their attempts to institutionalize IGE, but information existed on some schools that were unsuccessful. The background data on an IGE Schools Questionnaire sent out by the Evaluation Section of the Wisconsin Research and Development Center in March 1976 did produce that information with response to the question, Do you consider your school an IGE school? Of the 1,049 questionnaires returned, 94 schools checked that they no longer considered themselves to be IGE schools. These 94 schools then constituted the population which typified the problem under study.

The second question on the questionnaire asked:

> When did your school organize its first I & R unit or learning community?

The response to this item further delimited the number of schools. The R & D Center was funded through three federal agencies to carry out a nationwide implementation effort of IGE between the years 1971-73. An

IGE implementation strategy was developed and workshops and institutes on IGE were offered at various locations during that time period. The researcher assumed that schools which adopted IGE during that time period had received somewhat similar training. Those schools from the original 94 that organized their first units during the period of 1971-73 formed a subpopulation to be considered for the study.

The third question on the questionnaire asked:

With which agency did your school's involvement in IGE originate?

Responses to this question eliminated those in the population which had not been implemented by the R & D Center. This study was funded by the R & D Center to only look at schools which had been implemented by the Center. A subpopulation of 40 schools then remained after the initial screening.

The next step in the screening of schools to be included in the study was a telephone call to the principal of each of the 40 schools during April and May 1977. This was to confirm the information from the IGE Schools Questionnaire and to use responses from additional questions to further limit the schools to be studied. Using a Screening Questionnaire (Appendix C), the researcher asked the following:

1. *When did your school begin to implement IGE?*
2. *What person(s) or agencies helped you with your implementation?*

These two questions verified the information that had been submitted on the R & D Center's questionnaire.

3. *When did your school discontinue its IGE program?*

This question was inserted for the purpose of retaining in the group those schools which had had a functioning IGE program for at least three years before discontinuing it. Research (Goodson & Hagstrom 1971; Ironside 1972; Klausmeier 1971; Knezevich 1972) indicates that the successful implementation of IGE within a school takes at least three years. The researcher felt that if a school had tried IGE for that period of time, then the school had really made an effort toward institutionalizing the innovation.

4. *Were you the principal when your school implemented IGE?*

The researcher realized that in a six-year period there would probably be some administrative changes. However, even if the principal had not been the implementing principal, the school was kept in the group. Primary source information is vital but it was felt that the new principal had some knowledge of the reasons through working in the district, staff discussions, or information from other administrators and could serve as a secondary source.

5. *Do you still have teachers on your staff who served as unit leader?*

6. *Do you still have teachers on your staff who worked in the units?*

From these questions, the researcher wanted to interview two former unit leaders and two former staff teachers. These questions eliminated several schools from the study that had had almost a complete change in personnel. In such schools, there were not four former IGE staff members left to interview.

7. *Is there someone in the district office who assisted your school with its IGE program?*

This question was used to identify other personnel within the district who could serve as an additional source of information for determining the reasons for a school discontinuing IGE.

8. *Would you be willing to participate in a research study to ascertain why some schools have discontinued their IGE program?*

At this point, 10 schools remained. When the researcher was reconfirming the school staffs' willingness to participate in the study, two principals did not want their school to be included for various reasons. The final group of schools which remained after the second screening consisted of eight schools from five different states. These schools, as determined by the researcher, then represented those cases which could provide data for the study.

The selection of the respondents to be interviewed by telephone was made in collaboration with the school principal. Each principal was asked the names of all teachers who had served as IGE unit leaders or teachers. The sample to be interviewed was then determined in differing ways, depending upon certain circumstances.

1. For most schools, the researcher listed all names beside a number. From two boxes of numbers, the researcher randomly drew two numbers. The teachers whose names were listed by the numbers drawn were to be interviewed.

2. In one school, the researcher called each day at a selected time and the former IGE teacher or unit leader who was in the staff

lounge during that period was interviewed.

3. In another school, the district office person gave the researcher the names of former IGE staff to interview since the principal was new and did not know who had been on staff during the IGE period.

In two schools, there were only four former IGE teachers available to be interviewed so the sampling process could not be used.

In addition to the 32 teachers and 8 principals to be interviewed, there were four district office personnel willing to be interviewed. They had assisted the selected schools when they initially implemented IGE. The researcher determined that the 44 individuals selected from the 8 schools and 4 district offices would serve as the respondents to be interviewed in gathering data for the problem under study.

Development of Data Collection Instruments

The method used to collect data systematically from the selected respondents was a semi-structured interview schedule. Van Dalen (1966, p. 301) and Good (1966, p. 213) defined a schedule as a data-collecting instrument used in face-to-face or telephone interviews where the respondents' answers are recorded by the interviewer. Forcese (1973) stated, "an interview schedule is virtually identical to a questionnaire in that it consists of precisely designated questions, worded in full, some pre-coded or closed, and others open-ended." The interview schedule serves to translate the research objectives into

specific questions where the responses will provide data necessary to test the hypotheses or questions which have been posed. Further, it assists the interviewer in motivating the interviewee to respond and provide the desired information being sought (Cannell & Kahn 1966, p. 340).

The construction of the schedule determines the quantity and quality of the data collected. In constructing a schedule, one should keep in mind seven points (Cannell & Kahn 1966, pp. 342-347):

1. Use language appropriate to the respondent.
2. Take into account the frame of reference the respondent will bring to the interview.
3. Be sure that questions are worded so that respondents can respond in a meaningful way.
4. Avoid questions which will cause respondents to give socially unaccepted or ego-threatening answers.
5. Avoid leading questions which suggest appropriate responses or contain emotionally loaded words.
6. Limit questions to a single idea, thought, or reference.
7. Follow a logical sequence in the interview process when developing questions.

The semi-structured interview schedule used in this study provided some structure for interviewing and the closed/open format gave some flexibility for presenting the questions. The closed or restricted type of question contains only one frame of reference with a range of responses offered. This type is easier to tabulate and analyze

because of its restrictive nature. An open or unrestricted question permits respondents "...to answer freely and fully in their own words and in their own frame of reference" (Van Dalen, 1966, p. 303). It can also reveal the respondents' feelings and motivations upon which they base their answers. The interview schedule can be made more flexible by using a combination of these two forms.

To provide some structure for the responses to the open-ended question on the schedule, a panel of experts was selected to give their opinions on the question. This panel was composed of three graduate students in educational administration, three professors of educational administration, three teacher educators, three R & D Center staff members, three IGE state coordinators, two IGE unit leaders, two IGE Institute personnel, one IGE teacher, and one IGE principal. The panel was also asked about their involvement and length of involvement with IGE. The responses to the question, *In your opinion, what causes a school to abandon their IGE program?* were recorded. The responses were coded: "0" = reason was not mentioned, "1" = of some significance for discontinuing IGE, and "2" = a very significant reason for discontinuing the program. The 15 variables with the highest computed means were used to construct a checklist for tabulating and probing the respondent answers to the question, *What do you feel caused your school to discontinue its IGE program?*

The checklist of variables which caused schools to discontinue their IGE program also provided probes for gathering additional information in those areas indicated by the panel of experts. Cannell and

Kahn (1966) generally classified the probing technique as "non-directive." "The effect of such probing is to increase the intensity or 'response-getting' power of the stimulus question without changing its content or structure" (Cannell & Kahn 1966, p. 359). The researcher utilized this technique in the interview to ascertain that all bases had been covered in the respondent responses to the open-ended question dealing with the variables leading to the discontinuance of IGE.

The interview schedule (Appendix G) consisted of background data on education, teaching and administrative experience; awareness, types of training and involvement with IGE; and reasons for discontinuing IGE. In addition, principals were asked to supply demographic data on their school (Appendix I).

In a pilot study, the schedule was used to interview two IGE principals, one IGE unit leader, a district office person involved with IGE schools, a former IGE teacher, and R & D Center staff members having a wide variety of IGE experience. Following the interview, the researcher discussed the interview format with each respondent to ascertain the extent to which:

1. Proper rapport had been established;
2. The purposes and objectives of the study were clear;
3. The method of selecting the respondent was understood;
4. The questions were appropriate, easily understood, and fulfilled the research objectives.

Those participating in the pilot study concluded that the interview format met all of the objectives and the schedule was clear and unambiguous.

Another important consideration in developing the interview format and schedule was the constraint of time. Having spent a number of years as a classroom teacher, the researcher was fully aware of the limited amount of time that teachers have available to participate in research studies. Therefore, the interview was designed to take 10 to 15 minutes for teachers and district office personnel and 15 to 20 minutes for principals. In the pilot study, it was found that the necessary data could be collected within the stated length of time and that the established time limits were realistic.

A follow-up to the interview was made by sending a copy of the checklist, Cause Discontinuance of IGE (Appendix J), to each respondent. In addition to suggesting the variables that respondents felt had caused the discontinuance, they were asked to rate them by indicating a "1" for a very significant cause to a "5" for a cause having little significance. At the close of each interview, the researcher read back the respondent's answers and the ranking of the causes. Further verification of the data was achieved by submitting the checklist to the respondents.

Analysis of the Data

To identify, classify, and order those variables which constrained people and organizations from successfully institutionalizing IGE, survey research techniques were used. The data were gathered through telephone interviews using an interview schedule. The responses to

the closed questions were coded and keypunched. Their means, standard deviations, ranges, and frequencies were computed using the WISE*STAT.DISTX program (Spuck, Stofflet, Fleckenstein 1971) from the Wisconsin Information Systems for Education.

The data from the open-ended question, *What do you feel caused your/the school to discontinue its IGE program?* were recorded on a checklist and in the comments made by the respondents. The variables on the checklist which were discussed/probed and rated were keypunched. The descriptive statistics computer program, DSTAT2, available through the Madison Academic Computing Center, University of Wisconsin, and the STATJOB transformation system were used to treat and transform the raw data. Sums, means, standard deviations, and variances were computed for these transformed variables. Using the computer program, PROGRAM BIGFACT, a statistical program available from the Wisconsin Information Systems for Education (Spuck, McIsaac, & Berg 1972), a factor analysis was performed on the twenty-four variables to define their interrelationships. The analysis determined which of the variables could be grouped together and how they related to each other.

The respondent's comments and clarification of responses to the open-ended question were noted during the interview and were typed immediately after the interview. At the conclusion of the gathering of the data, all of the typed comments were categorized and evaluated. They are included in Chapter IV where applicable.

In addition, the principals of the 32 schools who were contacted

during the initial screening process and were not included in the study were asked to respond to the question, *What do you feel caused your school to discontinue its IGE program?* Sixteen principals answered the question and their comments were also categorized and evaluated and are included in Chapter IV.

Design and Methodology Limitations

Survey research is subject to several limitations. Although it has been used to some degree in educational research, its potential value to aid in the solution of theoretical and applied educational problems has not been fully realized (Kerlinger 1973, p. 421). One of its values is that it is not necessary to gather data from large populations and a sample from the population will suffice in many cases. The researcher had no way of determining what the size of the sample would be when establishing the criteria and guidelines for the study. Frustration was experienced as the number of schools to be studied dropped markedly during the screening process. She realized that it would be extremely difficult to generalize about a larger population of schools from such a small number of cases.

The construction of the interview schedule and the use of proper interviewing techniques requires some expertise in order to collect valid and reliable data. The researcher made every effort to use language and terminology on the interview schedule that would be familiar to respondents. Such familiarity came from years of experience

as a classroom, district resource, and specialist teacher and in assisting schools with the implementation of their IGE programs.

In establishing rapport, the researcher tried to put the respondent at ease by the tone of voice, manner of presentation, conversational type of inquiries, wording of the introduction and closing, in repeating questions and answers, and in the comments to the respondent after the formal interview. However, without eye-to-eye contact there was no way of monitoring non-verbal and facial expressions for determining the effectiveness of the message. The researcher felt that in most instances good rapport had been established with respondents during the interview.

Criticism is leveled against interview methods because of the lack of structure. The script used with the schedule was carefully constructed to insure that the researcher and the organization she represented were identified, the purpose and objectives of the research were outlined, the methods for selecting the respondents were stated, the anonymous and confidential nature of the interview was clarified, and how the results of the study would be utilized and reported. One would be presumptious, however, in believing that the script was flawless.

Finding a convenient time and place with a private telephone for interviewing classroom teachers was a limiting factor. The researcher was aware that in many cases teachers would be using their own time and would be in a less than desirable place for the interview. If the interview was before school, during recess, or over the lunch

hour, there would be the pressure of having to watch the clock in order to return to the classroom at a given time. During several interviews, the respondent was interrupted by other teachers, students, or school secretaries. In one case, the interview was interrupted when someone disconnected the call. These distractions undoubtedly affected the respondent's replies. There was no way of knowing to what degree.

The researcher believed that in this study the respondents had little to gain or lose by responding openly to the questions. Their IGE program already had been discontinued. The only questions which might have jeopardized the respondent's interpersonal relationships within the school were those that dealt with the principal's leadership capabilities and his/her former commitment to IGE. A few respondents did disclose confidential information to the researcher as a means to clarify a response and these comments were not recorded.

The greatest limitation on the accurate collection of data in this study was the historical aspect. Campbell and Katona (1966) suggested that to limit selective forgetting, there should be a minimum period of time that the respondent is asked to recall. "Generally speaking, the more ephemeral and less eventful the experience to be reported, the shorter the reporting period" (Campbell & Katona 1966, p. 43). Respondents were asked to recall people, events, and materials dating back as much as six years. Some respondents did comment that they would really have to think back a number of years to recall facts regarding their awareness and implementation of IGE.

Summary of the Chapter

The lack of role of scientific, basic, and applied research in education practices was discussed. Then, the rationale for describing the study as descriptive research, utilizing survey research techniques, and employing telephone interviews to collect the data was presented.

The procedures for selecting the schools and respondents to be included in the study were discussed. The questions used in the screening process to determine those cases which would best typify the problem under study were stated. The methods used to construct the interview schedule for data collection were then described. The data analysis procedures also were discussed. The chapter closed with some limitations exhibited in the particular research techniques employed in this study.

CHAPTER IV

PRESENTATION OF THE DATA

The data gathered to gain insight into why some schools had discontinued their IGE program are presented in this chapter. The background information on the respondents and the demographic data on each school provides the setting and is presented in tabular form. The respondents' replies to each question on the interview schedule are grouped by school. A summary of the comments from the study's panel of experts and the comments of the principals of schools eliminated in the interview screening process relevant to why schools discontinue their IGE program are also included.

The schools which survived the screening process and agreed to participate in the study had been implemented during the years 1971-73 by the R & D Center. Each school considered itself as having been an IGE school for at least three years. In each school there were teachers on the staff who had participated in the implementation of IGE and they were interviewed.

Respondent Background Data

To protect the anonymity of the respondents and the schools, the background data in Tables 4.1 and 4.3 combines the replies of the

the teachers, the principal, and the district office representative if interviewed. The means of the number of years in their present position and in their school are shown in Table 4.1. The means for the total years of teaching experience are also listed. Table 4.3 shows the percentages of professional training of all respondents by school in each classification. The replies of the respondents by position for all of the background data are summarized in Tables 4.2 and 4.4. One will note in Table 4.4 that 75 percent of the respondents have completed at least a master's degree.

TABLE 4.1

MEANS OF RESPONDENT BACKGROUND DATA BY SCHOOL

Respondent Background Data	School							
	A	B	C	D	E	F	G	H
Years in Present Position	6.5	10.6	8.6	12.3	11.0	11.4	4.0	8.5
Years in Present School[a]	5.6	11.4	8.2	11.4	9.8	9.2	4.8	7.4
Total Years Teaching Experience	10.7	12.4	10.6	18.7	11.8	20.8	9.8	13.0

[a]District office personnel excluded.

TABLE 4.2

MEANS OF RESPONDENT BACKGROUND DATA BY POSITION

Respondent Background Data	Position		
	Teachers N=32	Principals N=8	District Office Personnel N=4
Years in Present Position	10.00	5.88	7.25
Years in Present School	9.13	5.88	a
Total years Teaching Experience	13.81	14.25	8.75
Total years Administrative Experience	a	9.63	9.50

[a]Not applicable

The number of years in their present position for all respondents ranged from 1 to 24 years with an average of 9 years. Excluding district personnel, the number of years respondents have been in their present school ranged from 1 to 23 years with an average of 8.5 years. The number of years of teaching experience for all respondents ranged from 2 to 40 years with an average of 13.4 years. The number of years of administrative experience of the principals and district

office personnel ranged from 3 to 19 years with an average of 9.6 years.

One teacher respondent had had administrative experience and his/her three years of experience was not included in the computation.

TABLE 4.3

PERCENTAGES OF RESPONDENT PROFESSIONAL TRAINING BY SCHOOL

Respondent Professional Training	School							
	A	B	C	D	E	F	G	H
Bachelors Degree	0%	20%	0%	0%	0%	0%	16%	0%
BA + 15 or more units	68	40	20	16	20	0	0	0
Masters Degree	16	20	60	68	80	40	16	84
MA + 15 or more units	16	20	20	16	0	60	68	16
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

One will note in Table 4.4 that 75 percent of the respondents had completed at least a master's degree. All of the principals and district office personnel had a master's degree and most had additional training beyond the degree.

TABLE 4.4

PERCENTAGES OF RESPONDENT PROFESSIONAL TRAINING BY POSITION

Respondent Professional Training	Position		
	Teachers N=32	Principals N=8	District Office Personnel N=4
Bachelors Degree	6%	0%	0%
BA + 15 or more units	28	0	0
Masters Degree	50	50	25
MA + 15 or more units	16	50	75
TOTAL	100%	100%	100%

School Demographic Data

The demographic data by school are presented in Table 4.5. The enrollment of the schools ranged from 235 to 926 students with most of the schools housing between 500 and 600 students. The number of teachers on staff ranged from 10 to 45 with an average of 23. The location of the schools was represented equally by those in small and medium sized cities with one school located in a large city and one in a rural area. No school considered itself as having an upper socio-economic school community. The middle and lower levels were represented equally. The "egg crate" or traditional room arrangement seemed to be the predominant type of school facility.

TABLE 4.5

DEMOGRAPHIC DATA BY SCHOOL

Item	School							
	A	B	C	D	E	F	G	H
Present School Enrollment								
201- 400				X				
401- 600		X			X		X	X
601- 800			X			X		
801-1000	X							
Present Number of Teachers								
10-20		X		X	X		X	
21-30			X			X		X
31-40								
41-50	X							
School Location								
City-100,000+		X				X		X
City-50,000-100,000	X		X	X			X	
Small city to 50,000								
Large city suburb					X			
Rural area								
School Socioeconomic Level								
Upper					X	X	X	X
Middle								
Lower	X	X	X	X				
Type of School Facilities								
Open space			X					
Pods		X				X		
Egg crate				X			X	X
Combination	X				X			

The schools to be discussed are identified by letters of the alphabet. To protect the confidentiality and anonymity of the responses, those interviewed are identified only by position. At each school, the principal and four former IGE teachers were interviewed. In four cases it was possible to interview a district office person who had assisted the IGE school with its program or had knowledge about the program. In all, 8 principals, 32 teachers, and 4 district office personnel were interviewed.

Data by School

School A

The district in which School A is located had undergone a complete reorganization. It was suffering from declining enrollment which had brought about many changes in staff and programs. The school had the largest enrollment of the schools in the study. The principal was in her first year at the school and had been hired from outside the state. The responses of those interviewed from School A and the district office follow.

Question: *How were you first made aware of IGE?*

Of the six respondents, two learned about IGE through college classes. One each became aware through school district personnel, publications, a district workshop, and participating on a parent study committee. The principal was familiar with individualized education but not IGE. She said that she had not heard the staff discuss the IGE program.

Question: *Did you participate in a three-day Principal-Unit Leader workshop?*

Two staff members had attended such a workshop and had found it to be helpful.

Question: *Did you participate in a school staff development workshop to help you begin to implement IGE?*

The four teachers interviewed had participated. Three had found it helpful and one had found it to be of no help.

Question: *Did you participate in an /I/D/E/A/ sponsored workshop or clinical?*

No one interviewed had attended this type of workshop.

The following three questions only relate to school district personnel.

Question: *Did you participate in a one-week invitational institute at Madison, Wisconsin?*

Question: *Did you participate in a one-day workshop for chief school officers sponsored by the R & D Center?*

Question: *Did you assist schools with their staff development workshops when they were implementing IGE?*

The district office respondent had not participated in any of these activities.

Question: *Have you had any other IGE training? What was the other training?*

One teacher had attended school workshops and had rated them as helpful. Two school staff members had attended college classes on IGE and had found them very helpful.

Question: *In what other ways have you been involved with IGE?*

One teacher had participated in the Systemwide Program Committee (SPC) and had been a member of the Association for Individually Guided Education (AIGE). One respondent had been involved in IGE as a member of a citizens' committee.

A compilation of the responses and ratings for the last question can be found in Table 4.6. The respondents' comments to the question are listed by variable.

Question: *What do you feel caused your/the school to discontinue its IGE program?*

Variable 1: Lack of district commitment

I had hoped that the district would do a pilot program or one school doing IGE. I had tried to get the district to do this, but I was not successful.

The school unitized in one curricular area. The district didn't follow through after the initial thrust to help with the other areas.

Variable 2: Withdrawal of financial support by the district

There was no district financial support for clerical help, people to work with the schools to help them follow the model, or released time for unit leaders.

The funds for doing the program were no longer available.

Money was really the problem. It was not economically feasible. We weren't able to purchase new materials.

I went to IGE workshops at _____ University, but I found that the district was not going to fully implement the program because of money problems. They did not put it into operation as they said they would.

We had only limited use of aides.

TABLE 4.6

SCHOOL A

Variables Which Caused the School to Discontinue Its IGE Program

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
1	Lack of district commitment	2	3		2	3		
2	Withdrawal of financial support by district	4		2		2		
3	Lack of commitment by school board		1		1			
4	Leadership lacking in principal	1	3		1	2	1	
5	Lack of commitment by principal		4	1	1	1	1	
6	Principal transferred or changed	3	3	2		1	2	1
7	Initial staff development weak	2	1		2	1		
8	No continuing staff development	1	3	2	1	1		
9	No IGE training for new staff		3	3				
10	Lack of teacher commitment	1	2	1	1	1		
11	Interpersonal conflicts among teachers	1	1		1	1		
12	Lack of communication about IGE to parents/community		3	1		2		

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

TABLE 4.6 (Continued)

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
13	Lack of understanding of IGE concepts by staff	2	1	2	1			
14	Program not adapted to school's needs initially		2	1	1			
15	Withdrawal of other financial support							
16	Problems with record keeping	1			1			
17	Problems with WDRSD	1						1
18	Problems grouping students							
19	Problems related to unit leaders							
20	IGE resource people left	1		1				
21	Philosophical differences about program	1		1				
22	Program did not meet student needs	1		1				
23	Rivalry between IGE and non-IGE schools							
24	Program took too much time							

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

Our administration was determined to implement IGE to some extent in spite of "lack of funds" and it just didn't work out.

Variable 3: Lack of commitment by the school board

The board still thinks that IGE is being used.

Variable 4: Leadership lacking in the principal

The principal couldn't have done anything about whether the program was successful anyway.

The lack of knowledge by the principal didn't help the program.

Variable 5: Lack of commitment by the principal

The principals were not putting their full weight behind the programs.

The administration must really want the program.

Variable 7: The initial staff development was weak

They should have geared the inservice to the management system.

The teachers were not prepared to use the materials.

We had an individualized math program and could use it with IGE. We couldn't figure out how to do a reading program like we did the math.

We really never fully implemented IGE. We did as much as we could and we still do.

Variable 8: No continuing staff development

There was no more inservice because there was no money.

The teachers were sold on the program at the beginning but the interest dropped off. This would have helped to keep it going.

Variable 10: Lack of teacher commitment

I liked it but not the way its working now. We needed support.

It was a district decision that everyone go IGE. Those who liked it still are doing it.

Teachers really need to be sold on the concepts.

Variable 11: Interpersonal conflicts among teachers

Some units dropped out because the teachers didn't like working with others; they preferred to be self-contained. They were bothered by changing schedules. Some of the older teachers were afraid and some teachers felt threatened.

I didn't like sharing my kids at first.

The teachers needed to get together to keep it going.

Variable 12: Lack of communication about IGE to the parents and the community.

There was not enough (communication) by the staff to the community.

The staff didn't come to the meetings.

We really found it hard to distribute materials to the parents.

Variable 13: Lack of understanding of IGE concepts by the staff

They didn't know how to use the organizational structure. They didn't understand how to shift students.

Variable 14: The program was not adapted to the school's needs initially

Because we didn't adapt the program, this was the basic reason for us dropping IGE.

Variable 16: Problems with the record keeping

The school didn't have any clerical help for record keeping.

Variable 17: Problems with the Wisconsin Design for Reading Skill Development (WDRSD)

We lacked materials and help for the program.

Variable 18: Problems grouping students

The teachers felt that it was too much trouble shifting kids so they went back to self-contained classrooms.

Variable 21: Philosophical differences about the program

There were conflicts in educational concepts between those that believed and those that didn't believe in individualization.

Variable 22: Program did not meet student needs

Socially they found that primary children in the district were better off if they could identify with just one teacher.

I feel my students need more structure.

All of the respondents from School A concurred that the main reason for discontinuing their IGE program was the transfer of the principal. Of the six respondents, five rated the lack of district commitment as the second most important reason. While the school no longer considered itself an IGE school, the following comments indicated the status of IGE within the school and the district.

We always have parts of IGE in our district inservice.

Our upper grade unit is still functioning. We have been able to keep up with the children and see the progress they are making.

All schools in the district still have some units.

Everyone in the district is given planning time even if they are not unitized.

I didn't like sharing my kids at first but I really like working in a unit situation.

I think the program was productive and the teachers were liking it.

I appreciate the program.

The district still has some of the IGE concepts in the schools...some of the same organizational structure.

We do have a minimum day for planning for instruction. The unit planning has not been abandoned.

School B

A bilingual program was mandated for this school and a new principal was brought in to implement the program. The principal did not understand IGE so he encouraged the staff to discontinue the management system. The responses of those interviewed from School B follow.

Question: *How were you first made aware of IGE?*

Two of the respondents learned about IGE from their former principal. One became aware through school district personnel and another member of the staff heard about it in a school workshop. The IGE program was already in the school when the present principal took over.

Question: *Did you participate in a three-day Principal-Unit Leader workshop?*

Only one staff member participated in this workshop and the respondent did not find it to be helpful.

Question: *Did you participate in a school staff development workshop to help you begin to implement IGE?*

The four teachers who were interviewed had participated in the workshop. Three had found it helpful and one did not find it to be helpful.

Question: *Did you participate in an /I/D/E/A/ sponsored workshop or clinical?*

One respondent had participated and had not found it to be helpful.

Question: *Have you had any other IGE training? What was the other training?*

Two respondents had attended college classes. One rated them as very helpful and the other rated them as helpful. Two teachers had attended school workshops on IGE. One rated them as very helpful and the other as helpful.

Question: *In what other ways have you been involved with IGE?*

None of the respondents had had any other involvement with IGE.

A compilation of the responses and ratings for the last question can be found in Table 4.7. The respondents' comments to the question are listed by variable.

Question: *What do you feel caused your school to discontinue its IGE program?*

Variable 1: Lack of district commitment

Programs are a local school decision...a decentralized operation.

Variable 3: Lack of commitment by the school board

The school board made many commitments to new programs and then didn't support them. They made too many commitments.

Variable 4: Leadership lacking in the principal

The lack of leadership by the principal was a big factor for us to drop the program.

Variable 5: Lack of commitment by the principal

TABLE 4.7

SCHOOL B

Variables Which Caused the School to Discontinue Its IGE Program

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
1	Lack of district commitment		2			1		1
2	Withdrawal of financial support by district							
3	Lack of commitment by school board		2			1	1	
4	Leadership lacking in principal		3	2	1			
5	Lack of commitment by principal		3	3				
6	Principal transferred or changed	4	1	4	1			
7	Initial staff development weak	1			1			
8	No continuing staff development		2	2				
9	No IGE training for new staff	1	1	2				
10	Lack of teacher commitment		3		1	2		
11	Interpersonal conflicts among teachers	1	2	1		1	1	
12	Lack of communication about IGE to parents/community		2	1		1		

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

TABLE 4.7 (Continued)

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
13	Lack of understanding of IGE concepts by staff		2			2		
14	Program not adapted to school's needs initially		3		1	1		1
15	Withdrawal of other financial support							
16	Problems with record keeping	1			1			
17	Problems with WDRSD	3		1	2			
18	Problems grouping students							
19	Problems related to unit leaders							
20	IGE resource people left	3	1	2	1	1		
21	Philosophical differences about program							
22	Program did not meet student needs							
23	Rivalry between IGE and non-IGE schools							
24	Program took too much time	1		1				

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

I had no knowledge of the program.

A new principal came in with a bilingual program and his program took precedence over everything else.

Variable 6: Principal transferred or changed

The new principal didn't know the program.

A change in the principal made the difference.

Variable 7: Initial staff development weak

The people giving the initial inservice knew their subject and assumed everything was clear to others but it was unclear. It was difficult to follow.

Variable 10: Lack of teacher commitment

The staff morale was low due to the principal.

There is a split...it's divided the staff. Some are for and some are against the program.

Teachers have indicated that they want to go back to self-contained classrooms.

Variable 11: Interpersonal conflicts among teachers

There needed to be conflict resolution when I arrived at the school. There was conflict between Chicano and Anglo over educational philosophy.

Variable 13: Lack of understanding of IGE concepts by staff

I considered IGE the reading design and not the management system at first.

Variable 16: Problems with record keeping

There is too much bookkeeping involved. Now we have to do student profiles for all subjects.

Variable 17: Problem with WDRSD

Demands of the new bilingual program...couldn't keep up with IGE.

There was too much time needed to do the program right.

The basic reason given by School B respondents for discontinuing their IGE program was the transfer of the principal. Another important reason that those interviewed indicated caused them to discontinue the program was the departure of the staff member who served as their resource for IGE and the reading program. They felt that there was no longer anyone on the staff to give them the support and assistance that they needed to carry on the programs. Other reasons were fairly well distributed among the other variables. The respondents indicated that there were still some aspects of IGE functioning in the school.

> As a spin-off from IGE, we have retained some of the elements of the management system. We have pod (unit) leaders and weekly pod (unit) meetings.
>
> We still use part-time...units, pod meetings, the IPM, and multigrading.
>
> I liked the program...felt kids did well in it.
>
> We have parts of the program. We meet as pods, have pod leaders, and exchange students on a part-time basis.

School C

This school had been a pilot for the IGE program in the district. Structural changes had been made in the building to facilitate the implementation of the program. The responses of those interviewed from School C follow.

Question: *How were you first made aware of IGE?*

Two teachers first learned about IGE from the school principal and the superintendent had discussed the program with the principal.

One teacher had heard about the program in a college class and the other teacher attended a district workshop on IGE.

Question: *Did you participate in a three-day Principal-Unit Leader workshop?*

A teacher had attended the workshop and had found it to be helpful. The principal said that the workshop had been very helpful in assisting him to implement the concepts with the staff.

Question: *Did you participate in a school staff development workshop to help you begin to implement IGE?*

All of the respondents had participated in the staff development workshop. Two had found it to be very helpful and two had rated it as helpful in assisting them with IGE. One respondent did not think that the workshop had been helpful, feeling that it never went beyond the awareness training.

Question: *Did you participate in an /I/D/E/A/ sponsored workshop or clinical?*

No respondent had had this experience.

Question: *Have you had any other IGE training? What was the other training?*

The IGE training varied among the respondents. Two had visited other schools and had observed IGE being practiced and rated this experience as very helpful. One had attended a workshop on IGE which was helpful and another teacher had attended a college class on IGE and rated it very helpful. One respondent had attended IGE PACT sessions and found that they had only dealt with awareness and were not helpful in maintaining the program.

Question: *In what other ways have you been involved with IGE?*

The principal and two teacher respondents had served on the Systemwide Program Committee. In addition, one respondent had been a member of the State IGE Coordinating Council and another respondent was active in an IGE League.

A compilation of the responses and ratings for the last question can be found in Table 4.8. The respondents' comments to the question are listed by variable.

Question: *What do you feel caused your school to discontinue its IGE program?*

Variable 1: Lack of district commitment

I think that they would have been more committed if IGE had been districtwide.

Variable 2: Withdrawal of financial support by the district

The board would no longer provide financial support.

They were spending about $80,000 on aides...they withdrew the funds.

The district took away the aides because of money problems.

The district took away funds. We had no more aides ...can't have small groups...no clerical help.

The lack of money was the big reason. The local referendum lost out. Our IGE program was the top priority to be cut. The amount of money spent on our school was not in proportion to the rest of the district...was too much for too few. The board felt it was not fair to the other schools in the district.

The withdrawal of funds was the main reason we dropped IGE. We lost our aides...we do what we can with the personnel we have.

TABLE 4.8

SCHOOL C

Variables Which Caused the School to Discontinue Its IGE Program

Item Number	Variable	Frequency						
		Reply*		Rating*				
		D	P	1	2	3	4	5
1	Lack of district commitment	1	3		1			3
2	Withdrawal of financial support by district	5		3	2			
3	Lack of commitment by school board	2	3	1	3	1		
4	Leadership lacking in principal							
5	Lack of commitment by principal							
6	Principal transferred or changed							
7	Initial staff development weak							
8	No continuing staff development		1					1
9	No IGE training for new staff		1					1
10	Lack of teacher commitment							
11	Interpersonal conflicts among teachers							
12	Lack of communication about IGE to parents/community		2			2		

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

TABLE 4.8 (Continued)

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
13	Lack of understanding of IGE concepts by staff							
14	Program not adapted to school's needs initially							
15	Withdrawal of other financial support		2		2			
16	Problems with record keeping							
17	Problems with WDRSD							
18	Problems grouping students							
19	Problems related to unit leaders							
20	IGE resource people left							
21	Philosophical differences about program							
22	Program did not meet student needs							
23	Rivalry between IGE and non-IGE schools							
24	Program took too much time							

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

Variable 3: Lack of commitment by the school board

The board could have considered "lack of student gains" a factor in not supporting the program.

The board's decision was that we can't use the IGE label.

The board felt it was not fair to the other schools in the district to have aides, etc. so they were not totally committed.

Maybe it was only a member or two that was not committed.

Variable 12: Lack of communication about IGE to parents and the community

We prepared materials...parents didn't come in to find out about the program. I don't think that they were really interested in finding out.

Variable 23: Rivalry between IGE and non-IGE schools

There was some jealousy with the non-IGE and the IGE schools over money, but I don't think it was a big factor.

Only two schools in the district went into IGE. The other schools had some feelings about us having aides.

All of the respondents felt that there had been total commitment to IGE by parents and teachers. The principal had been very supportive during the implementation of the program. The primary reasons for the school to discontinue IGE were the lack of district commitment by the withdrawal of additional financial support for aides and extra pay for unit leaders and the lack of commitment by the school board. The school had continued as much of the program as possible with a group of volunteers to assist with grouping. The IIC continued to

meet on their own time since released time was also discontinued. The basic structure of IGE was continued without the IGE label. The continued support for the program is evident in the respondents' comments.

> The longer we were in the program, the more refined it became. We had continuing staff development and there was a real commitment by the staff. We knew where we were going and what we wanted from the program.
>
> We have a richer staff and do more for kids which is a spin-off from the program.
>
> I think the program is tremendous and I hoped that they would make the whole district IGE.
>
> We're still an IGE school but not officially. We're still using some of the concepts...haven't changed much really.
>
> ...was very pleased with IGE. The experience has been beneficial. Everybody was very committed to the program.
>
> We're still using some of the ideas in our teaching ...unit meetings...units...block time for teacher planning. The students do some shifting for skills but they are leveled for the most part.

School D

This school was a small country school that came into a small district as part of a consolidation plan. The old school building was razed and a new building was built on the traditional plan. The area is conservative and an open-plan facility was vetoed. The responses of those interviewed from Schoól D and the district office follow.

Question: *How were you first made aware of IGE?*

Three respondents learned about IGE from the superintendent who had attended meetings in Madison, Wisconsin, at the R & D Center. Other respondents were made aware of IGE through the school principal, at a school workshop and at a conference.

Question: *Did you participate in a three-day Principal-Unit Leader workshop?*

Three of the respondents had participated in the workshop. One had found it to be very helpful and two had found it to be helpful in formulating plans for implementing IGE in their school.

Question: *Did you participate in an /I/D/E/A/ sponsored workshop or clinical?*

The principal had found this workshop helpful. One other respondent had had an /I/D/E/A/ two-day session included in a class on Individualized Instruction and did not find it helpful.

The following three questions only related to school district office personnel.

Question: *Did you participate in a one-week invitational institute at Madison, Wisconsin?*

The respondent had attended and had thought it was very helpful.

Question: *Did you participate in a one-day workshop for chief school officers sponsored by the R & D Center?*

The respondent had not participated in this workshop.

Question: *Did you assist schools with their staff development workshops when they were implementing IGE?*

The respondent had assisted the schools with their workshops.

Question: *Have you had any other IGE training? What was the other training?*

Two respondents had found college classes on IGE to be very helpful. Another respondent had visited other IGE schools and rated that experience as helpful. The district office respondent had attended the second IGE institute at Madison, Wisconsin and had found the sessions to be very helpful.

Question: *In what other ways have you been involved with IGE?*

One respondent had been a member of the Systemwide Program Committee and the State IGE Coordinating Council and had assisted with a league. Three other respondents had also been members of the Systemwide Program Committee.

A compilation of the responses and ratings for the last question can be found in Table 4.9. The respondents comments to the question are listed by variable.

Question: *What do you feel caused your/the school to discontinue its IGE program?*

Variable 1: Lack of district commitment

Aides are needed for the program and we were not given enough for the school.

Variable 2: Withdrawal of financial support by the district

The district eliminated funds for traveling to conferences.

Funds to attend meetings, institutes, etc. were cut.

Variable 7: Initial staff development weak

The state coordinator worked with us a lot. The

TABLE 4.9

SCHOOL D

Variables Which Caused the School to Discontinue Its IGE Program

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
1	Lack of district commitment		1		1			
2	Withdrawal of financial support by district	1				1		
3	Lack of commitment by school board							
4	Leadership lacking in principal		1	1				
5	Lack of commitment by principal		1	1				
6	Principal transferred or changed							
7	Initial staff development weak	1	4		3	1	1	
8	No continuing staff development		3	1	1		1	
9	No IGE training for new staff		2	1				1
10	Lack of teacher commitment	3		2	1			
11	Interpersonal conflicts among teachers	2	1	1	1	1		
12	Lack of communication about IGE to parents/community		1				1	

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

TABLE 4.9 (Continued)

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
13	Lack of understanding of IGE concepts by staff		2			2		
14	Program not adapted to school's needs initially	1	2	1	1			1
15	Withdrawal of other financial support	1		1				
16	Problems with record keeping							
17	Problems with WDRSD	2		2				
18	Problems grouping students							
19	Problems related to unit leaders	1				1		
20	IGE resource people left							
21	Philosophical differences about program							
22	Program did not meet student needs							
23	Rivalry between IGE and non-IGE schools							
24	Program took too much time							

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

approach was "big city" and we're in a small rural area and it just didn't work.

Not enough teachers were involved in the training.

Variable 10: Lack of teacher commitment

We wanted a fully committed staff...some are and some aren't...needed to work on the basic philosophy of the teachers.

A few of the teachers were not for IGE. I believe that you need 100 percent to be successful.

Responsibility for keeping the program running fell to one person totally.

Some fifth and sixth grade teachers said "Yes" to do the program even though they didn't want to. They felt that they would be pressured into doing it. Some were not sharing their ideas and materials.

As a unit leader, I skewed all the cards and did all the grouping. No one would help with the planning or final testing. The others went along if I did it all.

Teachers didn't want to be transferred out of their buildings...had building loyalties but not to the program.

Variable 11: Interpersonal conflicts among the teachers

Teachers began to criticize each other. A unit leader didn't accept the ideas of others...they wanted to make changes.

Needed to have people who could work together.

Variable 12: Lack of communication about IGE to parents and the community

When we moved back into our school, we didn't return to IGE patterns. Parents didn't complain about not doing IGE.

Didn't continue the communications to the new parents.

Variable 17: Problems with WDRSD

We were already doing the same thing (phonics) in every grade and in every room. In IGE, we found we were teaching toward the tests.

When we used the Design, we had to work around the specialists' schedules and it was hard to do the grouping.

Found with the skills groups that the students didn't know the skill. They'd retake the test and memorize it.

I had to find all the materials (outside) for the three-week sessions...was difficult finding materials. The teachers kept the materials they did have to themselves. It was easier for teachers but hard on the children.

Many teachers found that the children passed tests. They had the tools but they were not able to apply what they knew...felt we could do that job in a reading situation.

We were already in a basic skills program with the emphasis on phonics.

Some of the teachers didn't understand the Design concepts.

Variable 18: Problems grouping students

I didn't want readers with non-readers...didn't know what to do with them.

Found that multigrading didn't work too well...don't do first grade with others.

...discarded formal grouping...not grouping for skill groups.

When we moved to another building (temporary) for 1½ years, it was too hard to group children. They had long distances to walk to the rooms...think some of the teachers were relieved when we moved back. They could go back to their self-contained classrooms.

Needed more aides to do the program properly.

Variable 19: Problems related to unit leaders

It was a personnel problem with two unit leaders.

There was no released time for unit leaders. They had to do their unit work during their preparation time.

Variable 21: Philosophical differences about the program

The former superintendent was pro-IGE and he had encouraged schools to go into IGE. There's been a change in philosophy with the new person.

The new superintendent came in and brought up IGE at an administrative council meeting. We wanted a fully committed staff...we've struggled through it for a number of years.

Variable 22: Program did not meet student needs

The testing scores were not showing growth.

There seemed to be some confusion over what IGE was and some of the staff equated it with the Wisconsin Design for Reading Skill Development (the Design). From the comments of the respondents, the implementation of the Design seemed to have been a problem with most of the teachers on the staff since they felt that the program they were using was teaching the same things. They felt that the Design had been a very significant cause for discontinuing IGE. Five of the respondents thought that the initial staff development had been weak in that the implementor had tried to use a "big city" approach with them, and it didn't help them as a rural school.

Personnel problems with unit leaders and a lack of teacher commitment to the concepts of IGE were important to some respondents.

While the new building was under construction, the staff had had very limited space for implementing the grouping aspects of the program. Since the new building was designed in a traditional manner, most of the staff returned to the self-contained classroom mode of teaching. However, some of the elements of IGE still remain.

> Some of the teachers have incorporated another reading program and the Design...another math program... They seem to fit together well.
>
> It made us more aware. Teachers were giving "lip service" to ideas; now they do more planning to meet needs of the individual.
>
> Maybe we're unique but there was little change... not doing things much differently now...still grouping.
>
> We did more skills when we were in IGE. I think the teachers have gained immeasurably in things we can't really evaluate.

School E

It was a district decision that this school adopt IGE. When they did implement IGE, they were in an old building with poor facilities which made grouping of students difficult. The building has since been replaced. The responses of those interviewed from School E follow.

Question: *How were you first made aware of IGE?*

The principal learned about IGE from other school principals. Three teachers participated in a district workshop on IGE and the other teacher was told about IGE by the school principal.

Question: *Did you participate in a three-day Principal-Unit Leader workshop?*

The principal and two teachers had attended the workshop. Two rated it as very helpful and the other rated it helpful.

Question: *Did you participate in a school staff development workshop to help you begin to implement IGE?*

All of the respondents had been involved in the school staff development workshop. Two rated it very helpful, two rated it helpful, and one found it to be of no help.

Question: *Did you participate in an /I/D/E/A/ sponsored workshop or clinical?*

No respondents had participated in this type of workshop.

Question: *Have you had any other IGE training? What was the other training?*

One respondent had visited other IGE schools and had attended a course on IGE at a university and had found them very helpful. Another respondent had attended a school workshop on IGE and rated it as helpful.

Question: *In what other ways have you been involved with IGE?*

One respondent had been on the Systemwide Program Committee and another one had participated in league activities.

A compilation of the responses and ratings for the last question can be found in Table 4.10. The respondents' comments to the question are listed by variable.

Question: *What do you feel caused your school to discontinue its IGE program?*

TABLE 4.10

SCHOOL E

Variables Which Caused the School to Discontinue Its IGE Program

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
1	Lack of district commitment		1			1		
2	Withdrawal of financial support by district		2			1	1	
3	Lack of commitment by school board		1		1			
4	Leadership lacking in principal		1			1		
5	Lack of commitment by principal							
6	Principal transferred or changed							
7	Initial staff development weak	1	2	1		1	1	
8	No continuing staff development		3	1	1	1		
9	No IGE training for new staff		1	1				
10	Lack of teacher commitment	2	3	4		1		
11	Interpersonal conflicts among teachers		1			1		
12	Lack of communication about IGE to parents/community		2			1	1	

*D - Respondent discussed the variable
P - Interviewed probed for the variable

+1 - Very significant cause
5 - Of little significance

TABLE 4.10 (Continued)

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
13	Lack of understanding of IGE concepts by staff	1	2		2	1		
14	Program not adapted to school's needs initially		4		3	1		
15	Withdrawal of other financial support		1				1	
16	Problems with record keeping	1		1				
17	Problems with WDRSD	4		4				
18	Problems grouping students	4		3	1			
19	Problems related to unit leaders							
20	IGE resource people left							
21	Philosophical differences about program		1			1		
22	Program did not meet student needs	1			1			
23	Rivalry between IGE and non-IGE schools							
24	Program took too much time	1		1				

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

Variable 1: Lack of district commitment

They got the program started so it was O.K. to drop it.

Variable 7: Initial staff development weak

We went into the program too quickly and there was not enough preparation...learned about IGE second-hand from other schools.

Variable 10: Lack of teacher commitment

The teachers lost interest in the program after they were in. IGE was not popular among the teachers.

We were told that we would implement IGE...had a district workshop.

The staff showed wide dissatisfaction over IGE.

Everyone had negative feelings because we were told, not asked, to go into the program.

The faculty was not the best for the organizational plan.

Variable 12: Lack of communication about IGE to parents and the community

We tried to make the parents aware. We are in a depressed area. They didn't seem to care if we were in or out of the program.

We sent out a questionnaire about the program. Found that the parents were not really concerned.

Variable 13: Lack of understanding of IGE concepts by staff

The concept didn't work this time in this particular situation. Seemed to be a matter of philosophy versus process. Took a course and visited other IGE schools and saw it working.

We went into the program too soon...not enough knowledge of the concepts.

Variable 14: Program not adapted to school's needs initially

We just did not go about the whole thing properly.

Variable 16: Problems with record keeping

Program took too much record keeping.

Tremendous amount of paper work involving a small period of the day.

Variable 17: Problems with WDRSD

Put in a new reading program and the Design at the same time. It was too much to try at once.

Only used IGE in reading one-half hour a day. There was no carry over of skills. Not enough reinforcement. Lots of work but not getting the benefits.

We used IGE in phonics because we thought it would be easiest to implement.

We tried the Design and found that the children were not getting the most from the instruction. Children were not applying skills; the instruction was in isolation.

There was not enough materials for skills. One always had to be looking.

The program was not doing what we wanted it to do. Skills were taught in isolation...not reinforcing, no carry over and it was difficult to carry through. Needed more materials. Pretests were not really showing what the child knows. The children didn't know what to expect on the tests...didn't do well.

Teachers were responsible for gathering materials ...not enough time.

Too much planning time needed for a small part of the day.

Variable 18: Problems grouping students

There was lack of adequate space for grouping and adequate numbers of personnel to take groups.

Older school building with three floors...too much moving for first grade.

Units would be finished with skills before others and we couldn't change.

Not enough volunteers for groups. It's a depressed area and we couldn't get parents to help.

We couldn't have small groups because of poor facilities and no extra help.

Needed staff for grouping. Sometimes we had 35 volunteers to help with the learning centers.

The facilities were poor initially...logistics of trying to move kids were hard. We had three-week cycles...never felt that I got to know the students.

Variable 21: Philosophical differences about the program

Philosophical differences existed...some were for and some were against the program.

Variable 22: Program did not meet student needs

Children were not showing progress.

Children were re-tested on skills...they were not showing progress.

Variable 24: Program took too much time

Program took too much planning time for such a small part of the day.

Over one-half of our planning time was spent for just one-half hour of IGE. We were getting no results for the amount of time spent.

There was too much time involved for meetings, gathering materials, etc.

The lack of teacher commitment seemed to be the major reason for discontinuing IGE. The staff resented the district telling them to go into IGE and not asking them if they would like to try IGE. There was not enough background preparation since the school went into

the program too quickly. The old building and lack of space with a limited number of staff made it very difficult to group students. This brought about a number of problems when trying to use the Design to teach reading. It was difficult for units to have planning time since there was no one to take a class as there were no specialists working in the building. In the end, the whole school voted to discontinue IGE. There were some positive feelings stated about the program.

> I think the unit idea and multigrading are very good.
>
> The unit organization seems to be effective. The teachers are working together to have individualized instruction.
>
> We tried the program for three years. We had units, unit leaders, an IIC, and unit planning time of one hour of released time per week.

School F

This school is located in an upper middle-class neighborhood and the facilities were characterized as "beautiful" by a respondent. At one time, one-half of the district schools were involved in IGE. The district had done much shifting of principals and teachers. The present principal had been at the school only a short period of time. The responses of those interviewed from School F follow.

Question: *How were you first made aware of IGE?*

Three respondents were made aware of IGE through the former principal of the school. One teacher had attended a school workshop on IGE and the principal learned about IGE at a state department of

education meeting.

Question: *Did you participate in a three-day Principal-Unit Leader workshop?*

One respondent had attended the workshop and had found it to be very helpful.

Question: *Did you participate in a school staff development workshop to help you begin to implement IGE?*

Four respondents had participated in the workshop. Two had found it to be very helpful, one rated it helpful, and one felt completely frustrated after attending.

Question: *Did you participate in an /I/D/E/A/ sponsored workshop or clinical?*

No respondents had participated in this activity.

Question: *Have you had any other IGE training? What was the other training?*

One respondent had found district workshops very helpful and another respondent had rated them helpful. The three who attended state IGE workshops rated them as very helpful. Two had participated in league sessions and had found them very helpful. One had attended an AIGE conference and thought the sessions were helpful. One had not found the school workshop helpful.

Question: *In what other ways have you been involved with IGE?*

Four of the respondents had participated in league activities and one had been a member of the Regional IGE Coordinating Council.

A compilation of the responses and ratings for the last question can be found in Table 4.11. The respondents' comments to the

TABLE 4.11

SCHOOL F

Variables Which Caused the School to Discontinue Its IGE Program

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
1	Lack of district commitment	4	1	5				
2	Withdrawal of financial support by district	5		5				
3	Lack of commitment by school board	4	1	5				
4	Leadership lacking in principal		1		1			
5	Lack of commitment by principal							
6	Principal transferred or changed		1					1
7	Initial staff development weak		2			2		
8	No continuing staff development		2		1		1	
9	No IGE training for new staff		2	1		1		
10	Lack of teacher commitment		5		2	1	1	1
11	Interpersonal conflicts among teachers		2	1		1		
12	Lack of communication about IGE to parents/community		2				1	1

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

TABLE 4.11 (Continued)

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
13	Lack of understanding of IGE concepts by staff		1				1	
14	Program not adapted to school's needs initially							
15	Withdrawal of other financial support							
16	Problems with record keeping							
17	Problems with WDRSD							
18	Problems grouping students	1		1				
19	Problems related to unit leaders	1		1				
20	IGE resource people left							
21	Philosophical differences about program	1		1				
22	Program did not meet student needs							
23	Rivalry between IGE and non-IGE schools	2				2		
24	Program took too much time	1		1				

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

question are listed by variable.

Question: *What do you feel caused your school to discontinue its IGE program?*

Variable 2: Lack of financial support by the district

Funding was the problem...funding stayed the same for all schools regardless of the program.

The district discontinued funding to send teachers to workshops and to pay dues to the league.

District withdrew the money for substitute teachers ...half of the teachers were able to attend IGE workshops. The district found the program to be very expensive. If you couldn't find someone within the school to take your class, you couldn't go.

We were busting our necks and not getting any help from the district...no extra funding.

The district couldn't afford to give additional funds.

We worked hard...no released time...expected to continue without help.

Variable 4: Leadership lacking in the principal

The principal's approach was dictatorial rather than cooperative.

It was a matter of how the leadership was used. He was up on the latest educational trends.

Variable 5: Lack of commitment by the principal

The principal was so committed to the program that I almost think it had the opposite effect.

Variable 7: Initial staff development weak

Facilitators came into the school to do the training. Their philosophy was so different...could not relate to us.

Variable 8: No continuing staff development

There wasn't any training after the initial thrust.

Variable 9: No IGE training for new staff members.

We weren't given time off to go to meetings.

Newer staff members have indicated that they did not receive training when they came on board.

Variable 10: Lack of teacher commitment

A few were committed at the beginning...once into the program, everyone seemed to be sold.

Parts of it were wearing people out.

Some teachers didn't want to take time to get involved in individualizing...rather teach skills themselves.

Variable 11: Interpersonal conflicts among teachers

Some people went to meetings; others had to cover for them.

Didn't seem fair that only unit leaders could attend exciting meetings.

Variable 13: Lack of understanding of IGE concepts by staff

Some of the staff had difficulty keying in objectives to the program.

Variable 18: Problems grouping students

Gave up a teacher...brought in interns and aides. Didn't have time to train volunteers to help. Would much prefer certified staff.

Variable 19: Problems related to unit leaders

Frustration because there was no released time for unit leaders...did regular teaching plus unit leaders' duties.

Unit leaders were supposed to keep information from

IIC meetings and then tell it at unit meetings. Some knew information before others...involved in listening several times. Need general staff meeting to tell everyone the first time.

Unit leaders went to workshops and team members were not able to attend.

Variable 21: Philosophical differences about the program

Some ideas and program weren't wholly accepted. The principal wanted to multigrade with three grade levels...teachers didn't. The teachers felt that they had enough levels within a grade as it was.

Variable 23: Rivalry between IGE and non-IGE schools

Non-IGE schools felt they were being slighted...IGE schools were getting additional things.

Other schools jealous of the additional funding... "haves and have nots."

Variable 24: Program took too much time

...used ideas, but the teachers felt that they were over-worked.

The program took time. Without financial help... were over-burdened.

The basic reasons for this school's discontinuing its IGE program were the lack of commitment by the district and the school board to the program evidenced by the elimination of district funds for released time for staff, league dues, substitute teachers, and aides. The gradual loss of teacher commitment to the program was also cited as a reason. Most of the respondents indicated that they had had good training in IGE and the continued assistance of a team of facilitators did much to help them refine their program. The respondents' positive

comments about IGE were an indication of their overall feelings about the program.

> The workshops were a super experience.
>
> The league meetings gave teachers a chance to speak to others in IGE from all over the state. It was one of the better learning experiences.
>
> IGE is good for children.
>
> Really felt that IGE was one of the finest things going...hope that the information helps other schools.
>
> ...saddest thing that ever happened...had to give up IGE.
>
> ...still feel that if we had continued, we would have seen great and wonderful things.
>
> ...really made an honest effort within the building for several years to make the program go.

School G

The school is in the low rent section of an affluent area of a large city. Most of the students reside in large apartment complexes and are bussed to the school. A large number of students are from single parent families. The student transciency rate is about 50 percent over the year. The present principal assumed the position after the school discontinued IGE. The responses of those interviewed from School G and the district office follow.

Question: *How were you first made aware of IGE?*

Four respondents were made aware of IGE through college classes. One respondent learned about IGE from the school principal and for

another respondent, it was already implemented in the school.

Question: *Did you participate in a three-day Principal-Unit Leader workshop?*

No respondents had participated in this workshop.

Question: *Did you participate in a school staff development workshop to help you begin to implement IGE?*

One respondent had participated in the staff development workshop and found it to be helpful.

Question: *Did you participate in an /I/D/E/A/ sponsored workshop or clinical?*

No respondent had participated in this activity.

The following three questions relate only to school district personnel. The district office respondent had not participated in any of the activities.

Question: *Did you participate in a one-week invitational institute at Madison, Wisconsin?*

Question: *Did you participate in a one-day workshop for chief school officers sponsored by the R & D Center?*

Question: *Did you assist schools with their staff development workshops when they were implementing IGE?*

Question: *Have you had any other IGE training? What was the other training?*

One respondent had had training in Individually Guided Science Education.

Question: *In what other ways have you been involved with IGE?*

The respondents had not been involved in other ways with IGE.

A compilation of the responses and ratings for the last question can be found in Table 4.12. The respondents' comments to the question are listed by variable.

Question: *What do you feel caused your/the school to discontinue its IGE program?*

Variable 4: Leadership lacking in the principal

The original principal became inhuman trying to do the program...very demanding.

There was no communication between the staff and the principal about the program.

Variable 6: Principal transferred or changed

Now there's a different atmosphere.

Variable 10: Lack of teacher commitment

Some teachers were committed to IGE and others were not...difference in philosophy.

Lots of staff left because of the program. It was too much of a strain...couldn't cope with the demands. The teachers burned out.

We began strong...support dwindled. We didn't get to know the children.

Variable 11: Interpersonal conflicts among teachers

There were too many children and no continuity in discipline. There were too many teachers telling too many kids what to do.

Discipline failed...people did not enforce discipline.

Variable 12: Lack of communication about IGE to parents and the community

In the beginning of the program, the administration had made the commitment first. The parents felt that they had had no say-so in adopting the program.

There was community pressure to discontinue IGE.

TABLE 4.12

SCHOOL G

Variables Which Caused the School to Discontinue Its IGE Program

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
1	Lack of district commitment							
2	Withdrawal of financial support by district							
3	Lack of commitment by school board							
4	Leadership lacking in principal		2	1		1		
5	Lack of commitment by principal							
6	Principal transferred or changed		2	1	1			
7	Initial staff development weak							
8	No continuing staff development		1		1			
9	No IGE training for new staff		3	1	1		1	
10	Lack of teacher commitment		3	1	1	1		
11	Interpersonal conflicts among teachers		4		3	1		
12	Lack of communication about IGE to parents/community		2		2			

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

TABLE 4.12 (Continued)

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
13	Lack of understanding of IGE concepts by staff		4			2	2	
14	Program not adapted to school's needs initially	1	2	3				
15	Withdrawal of other financial support		1					1
16	Problems with record keeping							
17	Problems with WDRSD							
18	Problems grouping students	1		1				
19	Problems related to unit leaders							
20	IGE resource people left							
21	Philosophical differences about program	3		1	1	1		
22	Program did not meet student needs	4		4				
23	Rivalry between IGE and non-IGE schools							
24	Program took too much time	1		1				

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

Parents were conservative educationally and the new concepts were difficult for them to accept.

The original communication to the parents...only about eight children working with a teacher. They didn't tell what the rest of the children would be doing.

Originally, we did a good job of communicating. Parents felt there was a lack of organization. Need to get back to the basics...too much noise.

Variable 13: Lack of understanding of IGE concepts by staff

Think that was true in individual cases.

Variable 14: Program not adapted to school's needs initially

The school's needs were not taken into consideration initially. The kinds of children we had were not considered.

The program was not good for our kind of students.

It was the wrong type of organization for the type of children we have. You're really not individualizing if you have one program for all of the population.

The problem was...brought in the IGE program from the outside and set it in the school. You need to work from the inside out... We're now taking elements from other programs and incorporating them.

We adopted the program originally because we are a very transcient school. We felt we could place children regardless of the level when they came into the school. We found that we couldn't do it.

Variable 15: Withdrawal of other financial support

We had other funds coming in...visitation funds through the county office. We were an exemplary school and received extra funds for having visitors. We used the funds for educational materials or for attending meetings.

Variable 18: Problems grouping students

We had difficulty fitting new children into the program as they came in.

I was working with too many children and I didn't get to know them. There was no continuity in the discipline. It made discipline difficult.

Teachers were responsible for too many children.

Began to have facility problems...marked increased in student enrollment.

Variable 21: Philosophical differences about the program

There was what I call "intraprofessional" differences among the staff...differences over what is best for the students.

There were local personnel problems. There were differences in educational philosophy among the parents, staff, and the principal. Needed total commitment of the staff, parents, and the principal. They were branching off...each going his own way.

Variable 22: Program did not meet student needs

Have a large group of unstable children. They need more stability, less movement, and a calmer atmosphere. We've gone back to a basically self-contained plan...movement is on a limited basis between two or three teachers.

The program was not good for our kind of students from single parent families...recently gone through divorce. Children need lots of structure because they don't get it at home. They're not able to work on their own.

We needed to continually evaluate the program...did not. We needed to make changes as we went along. We needed to be aware of teacher weaknesses...be aware of needs of children.

...thought that the program would fit needs but found we had more behavior problems and more noise.

> For the type of student we have, the program gave them too much freedom...couldn't handle freedom.
>
> Security was needed by the type of students we have. We were not meeting emotional and social needs...too many teachers with too many kids.
>
> The students needed more structure and stability.

Variable 24: Program took too much time

> The teachers burned out...tremendous amount of time involved in preparation for the program. The staff worked hours and hours on preparation.

The respondents felt that their students had unique needs due to family problems. The staff indicated that the major reason for discontinuing IGE seemed to be the failure of the program to meet the unique needs of their student population. This also related to conflicts among the staff over how to handle discipline and what the program could really do for the students. Some respondents indicated that the school board had been very supportive of the program initially but had bowed to parent pressure and had gone along with the decision to discontinue the program. This move by the board was thought to be purely political. The school during the IGE period had been an open space school. Since then, the walls had been put up for a return to a self-contained type of program. Some elements of IGE still remain.

> I had good feelings about IGE...especially the success in the reading area. The program did a good job.
>
> We have limited movement of students.

School H

The district in which this school is located had attempted many innovative programs. The former superintendent, characterized by a respondent as very progressive, had encouraged innovativeness. The district has since dropped most of the programs for various reasons. The school is a traditional type of facility in a middle class neighborhood. The principal had been in the school for a year. The responses of those interviewed from School H and the district office follow.

Question: *How were you first made aware of IGE?*

Each respondent learned about IGE from a different source. One had heard about it from other principals, one had attended a district workshop, one had accompanied the principal to a state department meeting, one had heard about it from school district personnel, and it was already implemented in the school when one teacher joined the staff.

Question: *Did you participate in a three-day Principal-Unit Leader workshop?*

One respondent had participated and had found it very helpful.

Question: *Did you participate in a school staff development workshop to help you begin to implement IGE?*

Two respondents had participated and they had found it to be very helpful.

Question: *Did you participate in an /I/D/E/A/ sponsored workshop or clinical?*

Two respondents had participated in this activity. One had

found it to be very helpful and one indicated that it was helpful.

The following three questions relate only to school district personnel.

Question: *Did you participate in a one-week invitational institute at Madison, Wisconsin?*

The respondent had not participated.

Question: *Did you participate in a one-day workshop for chief school officers sponsored by the R & D Center?*

The respondent had not participated.

Question: *Did you assist schools with their staff development workshops when they were implementing IGE?*

The respondent has assisted schools with their IGE implementation.

Question: *Have you had any other IGE training? What was the other training?*

Three respondents had received other IGE training in college classes. Two had found the classes helpful and one thought that they did not help.

Question: *In what other ways have you been involved with IGE?*

One respondent had attended league meetings and another had participated in a state IGE conference.

A compilation of the responses and ratings for the last question can be found in Table 4.13. The respondents' comments to the question are listed by variable.

Question: *What do you feel caused your/the school to discontinue its IGE program?*

TABLE 4.13

SCHOOL H

Variables Which Caused the School to Discontinue Its IGE Program

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
1	Lack of district commitment		3	1	2			
2	Withdrawal of financial support by district	3	1	1	1	1		1
3	Lack of commitment by school board	2	3	3		2		
4	Leadership lacking in principial							
5	Lack of commitment by principal							
6	Principal transferred or changed	1		1				
7	Initial staff development weak							
8	No continuing staff development							
9	No IGE training for new staff		2		1	1		
10	Lack of teacher commitment		3			3		
11	Interpersonal conflicts among teachers		1				1	
12	Lack of communication about IGE to parents/community							

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

TABLE 4.13 (Continued)

Item Number	Variable	Frequency						
		Reply*		Rating+				
		D	P	1	2	3	4	5
13	Lack of understanding of IGE concepts by staff							
14	Program not adapted to school's needs initially							
15	Withdrawal of other financial support		1		1			
16	Problems with record keeping							
17	Problems with WDRSD							
18	Problems grouping students							
19	Problems related to unit leaders	2		2				
20	IGE resource people left							
21	Philosophical differences about program	1		1				
22	Program did not meet student needs							
23	Rivalry between IGE and non-IGE schools							
24	Program took too much time	1			1			

*D - Respondent discussed the variable
P - Interviewer probed for the variable

+1 - Very significant cause
5 - Of little significance

Variable 1: Lack of district commitment

There was never any district commitment.

Variable 2: Withdrawal of financial support by the district

The district dropped aides and student teachers.

Variable 3: Lack of commitment by the school board

The unit leaders wanted extra pay, but the board turned it down.

The unit leader pay was a big issue. After several years, we felt we should have extra pay.

The board's failure to agree to extra pay for unit leaders was the deciding factor. The teachers went in with "all or nothing."

The program was killed when unit leaders requested an additional stipend.

Variable 4: Leadership lacking in the principal

There was too much input about the program from the principal and not enough from others in the district.

Variable 6: Principal transferred or changed

Principal was looking toward higher administration ...worked closely with the superintendent.

Variable 10: Lack of teacher commitment

Teacher support varied from upstairs to downstairs group. Some were for and some were against IGE.

The faculty seemed very committed but they might have "burned out" if they were still in the program.

New members on the staff were not really committed.

The first and second years were good, but it lost momentum as we went on.

Variable 18: Problems grouping students

We tried to implement IGE in all areas. We found that not every student needed individual experiences in all areas. Some could use small group experiences and some could not handle the individual approach.

Our work increased but we lost personnel in some instances and it was hard to individualize.

Variable 19: Problems related to unit leaders

They took away aides and student teachers and there was no released time because there was no one to relieve the unit leaders.

Unit leader pay was the issue...didn't feel that it was the total issue.

Different role for unit leaders. In discussions they are the "errand people"...run errands for the principal.

Variable 21: Philosophical differences about the program

The superintendent left and the new one had a different philosophy about the program.

Variable 24: Program took too much time

Too much time was needed to do the program right.

The extra pay for unit leaders was the deciding factor as to whether IGE would continue in the school. When the board failed to honor the request, the staff felt that the district and the school board were no longer committed to the program and the management aspect of the program was discontinued. While the school had dropped the IGE management system, parts of the program were still being used. Informally, the staff worked well together but they were not organized. When the school decided to go into IGE, the teachers gave a presentation before the school board. The district office respondent thought

that it was one of the best presentations in all aspects that had been given before the board and the board adopted the program.

> The staff did a good job of reporting to parents... developed their own reporting system. They also had a volunteer program going.
>
> We had everything going in the beginning.

Panel of Experts

The panel of experts selected by the researcher represented a wide background in working with and in IGE schools. In the group were graduate students, professors of educational administration, teacher educators, R & D Center staff, IGE state coordinators, IGE institute staff, unit leaders, a teacher and a principal. They were asked their opinions on what causes a school to abandon their IGE program. The responses were categorized and the means and standard deviations were computed and they are presented in rank order in Table 4.14. The first 15 variables were selected by the researcher to construct the interview schedule checklist used in the study (Appendix J).

The following are summaries of the comments made by the members of the panel in response to why schools discontinued IGE. The summaries are listed by the variables used in the study to record the respondents' replies to the last question on the interview schedule.

Variable 1: Lack of district commitment

To promote district commitment, central office personnel, from top down, who provide support services to the schools need an under-

TABLE 4.14

VARIABLES CAUSING SCHOOLS TO DISCONTINUE IGE SUGGESTED BY THE PANEL OF EXPERTS

Variables	Means	Standard Deviations
Lack of district commitment	1.238	.889
Lack of teacher commitment	1.000	1.000
Staff development - implementation weak	.810	.981
Staff development - need for continuing	.810	.981
Leadership lacking in the principal	.762	.995
Lack of commitment of principal	.714	.956
Lack of communication to parents/community	.667	.796
Withdrawal of district financial support	.619	.805
Lack of implementation - adapt to school's needs	.524	.814
Misconception of IGE concepts	.476	.680
Withdrawal of other financial support - Title funds	.429	.811
Lack of commitment - school board	.381	.805
Staff development - nothing for new staff	.333	.658
Change or transfer of principal	.333	.658
Interpersonal conflicts among staff	.333	.658
Staff development - no team building skills	.238	.625

TABLE 4.14 (Continued)

Variables	Means	Standard Deviations
School isolated - on own	.238	.625
No league or PACT	.238	.625
Program took too much time	.143	.359
Program a fad - in vogue to use	.143	.359
Lack of student achievement	.143	.359
Too much record keeping	.143	.359
No evaluation of program	.143	.359
No support group - teacher education institution, etc.	.143	.359
Changes in teaching staff	.095	.436
Changes in district office personnel	.095	.436
Lack of leadership - district office	.095	.436
Lack of communication to other principals	.095	.436
Program doesn't provide for basic skills	.095	.436

standing of the terms, practices, needs objectives, and goals of IGE. After the commitment is made, inservice, aides, instructional supplies, modifications in facilities, planning time, and differentiated staffing should be provided. Continuity in support services and commitment to the program must be maintained even though personnel changes take place in the district office.

Variable 2: Withdrawal of financial support by the district

To enable innovative programs to operate, the school district should allow additional monies in the budget for them. These programs may be more costly in terms of additional personnel and continuing inservice. As budgets are cut back, teachers have begun to experience reductions in support personnel, funds for league dues and meetings, and additional pay for unit leaders. A facilitative environment should provide the necessary financial support for maintaining a program once it is implemented in a school.

Variable 3: Lack of commitment by the school board

There is need for continuous communication between the board and the administration regarding programs in the district. The board should understand that some programs may entail additional financial support to provide training, supplies, and personnel. Once the board has approved the adoption of a program for a school, it should continue its commitment to facilitate the successful operation of the program.

Variable 4: Leadership lacking in the principal

Effective leadership of the principal is important when

determining whether the program is successful. There is need for enthusiasm and flexibility when working with the staff. While decision making is shared with the staff, the staff does need direction--someone to "hold onto the reins." The principal is the primary leader and when there is no evidence of leadership, the program usually fails.

Variable 5: Lack of commitment by the principal

The principal must be committed to the program and want to see it succeed. As a member of the staff, one must participate and assist with the ongoing inservice for the program. When new members join the staff, the principal needs to be knowledgeable about the program in order to inform them about all its components. The principal serves as the liaison between the school and the central administration to keep them apprised of the needs and the progress of the program.

Variable 6: Principal transferred or changed

A change in a key position, such as the principal, can mean the end to an innovative program. The IIC can be the "saving grace" in some schools in helping to maintain the program. When the staff has decision-making power and strength and several "movers" among its ranks, much can be done to keep the program going even if there is an administrative change.

Variable 7: Initial staff development weak

The initial staff development workshop should be more than three to five days. A knowledge base and new understandings need to be developed. Certain expectations required of the staff to implement the

program have to be established. Training in management and interpersonal skills is necessary. The staff must be made aware of what is involved in making a commitment to the program.

Variable 8: No continuing staff development

Staff development should be an on-going learning process for the total staff from awareness through renewal. It can help staff fit IGE into their philosophy of education. A linkage between teacher education institutions and the school can be established to provide resources for conducting the sessions. The training can provide additional skills beyond those required for the program's maintenance. Assistance can be provided in utilizing the IPM in other curricular areas. Continuing staff development can also provide support and encouragement to the staff as they implement the program.

Variable 9: No IGE training for new staff members

A continuing commitment by the school is needed to train and inform new staff about IGE. The principal and the unit leaders assume the training role and provide assistance and encouragement when needed. It is important that the new staff know what commitments have been made by other staff members toward implementing the program and what will be expected of them in order to keep the program functioning.

Variable 10: Lack of teacher commitment

Teachers need continual support after the initial awareness to maintain their original commitment. They are committed because they shared in the decision to adopt the program and it was not imposed on them. Also, it is important for them to realize that the district

office and the board are committed and supportive. They need the knowledge and the understanding to know what the program is all about. They need to know that the principal has made a commitment to implement the program and will support them in their endeavors. If their philosophy is "it's good for kids," the task will not be so overwhelming.

Variable 11: Interpersonal conflicts among teachers

Conflicts seem to develop among unit members. The length of time that a unit has been together may be a determining factor. The unit needs team building skills and problem-solving techniques. Roles within the unit need to be defined and skills and interests of unit members assessed. Methods for dealing with discipline, grouping kids, instructional materials, etc. should be determined and used by all members of the unit. If conflicts do arise among unit members that cannot be resolved, it probably will be necessary to exchange personnel and reorganize some units.

Variable 12: Lack of communication about IGE to parents and the community

Community opposition to the program arises when the school has not communicated the objectives to the parents and has tried to implement the program without informing them. Community support needs to be encouraged "early on" through meetings and written communications. Misconceptions concerning what IGE really is arise and the terms used in the program need clarification. Parental pressure to get "back to the basics" and provide a more structured environment comes about when

the communication linkage between home and school has not been successfully established.

Variable 13: Lack of understanding of the IGE concepts by the staff

The failure of awareness workshops to clarify the concepts and intent of IGE has led some to believe that the Wisconsin Design for Reading Skill Development and IGE are synonymous. The "label" IGE and "Open Education" are also thought to be one and the same. Others feel that if their school is organized into units, they are an IGE school. The Instructional Programming Model (IPM) component, considered to be difficult to understand and to implement, is being ignored by some IGE schools. The responsibility for developing an understanding of what IGE and its components really are falls on those who initially assist schools with implementing the program.

Variable 14: Program not adapted to the school's needs initially

The adoption of IGE by a school without first assessing the educational needs of its students and the community can lead to the failure of the program. Are the expectations of the program as outlined realistic for the students and the staff? Knowledge of the program's concepts and components will assist the implementors and the school staff with adapting the "model" to the unique needs of the school.

Variable 15: Withdrawal of financial support

Some schools have been labeled as "opportunistic" for adopting an innovative program for the extra monies it provided. When monies were withdrawn or ran out, the program was discontinued. The

commitment by the school and the district to implement the program was never really there. When Title funding was no longer available, many districts were not in a position to pick up the programs. Consequently, benefits provided by the extra monies--aides, additional materials and staff, conference pay, etc.--were eliminated. Schools felt that they needed the extra support to do the program and when it was no longer available, then the program was dropped.

Variable 16: Problems with record keeping

To meet the individual needs of students requires a great deal of record keeping. Test scores need to be recorded. Instructional groups based on skills needed have to be formed and reformed utilizing data from tests and teacher observations. The task of keeping track of all the data can be overwhelming. Help is needed in the form of paid aides or volunteers. Staff planning time is often used for doing clerical tasks and not on planning the instructional program. Teachers can't really justify the amount of time spent on paper work and not with children.

Variable 17: Problems with the Wisconsin Design for Reading Skill Development

Not mentioned as a "cause" by the panel.

Variable 18: Problems grouping students

Not mentioned as a "cause" by the panel.

Variable 19: Problems related to unit leaders

Not mentioned as a "cause" by the panel.

Variable 20: IGE resource people left

This was not mentioned as a specific cause at the school level. It was mentioned that the elimination of the role at the district, region, and state level left some schools without the consultant and facilitator resources available to assist them in maintaining and refining their IGE program.

Variable 21: Philosophical differences about the program

With the public saying that we want schools to go "back to the basics," some feel that the concepts of IGE, as they interpret them, do not provide the "basics." They see IGE as giving too much freedom to students and not providing the discipline that they think they need. The public is demanding that schools institute more structure in their programs. If IGE had been "sold" originally on what it could do for pupils, there would not be conflicts arising over what it does or does not do educationally.

Variable 22: Program did not meet student needs

Some schools have not provided for an on-going evaluation of their IGE program. They have waited too long before determining whether student needs have been met. They did not establish realistic goals for students in the beginning. Not knowing student needs, they have not provided for the continuous progress of the students. In IGE, the curriculum has to be looked at differently and made applicable to the needs of the students in that school. One should keep in mind that there is a lack of achievement test results to prove that IGE does make a difference and is better for students.

Variable 23: Rivalry between IGE and non-IGE schools

Peer pressure to drop IGE comes about from principals outside the program because the program is different. This can be eliminated by developing the proper perceptions about the program and what the program involves. These perceptions mean that IGE may cost more and may need more personnel than other programs. Equity in services needs to be provided among schools for IGE to be successful in the district.

Variable 24: Program took too much time

Many teachers were not aware of the amount of time and work that IGE requires when they implemented the program. It calls for more than a six-hour day. Teachers don't want to have to give up so much time. Time is really needed to plan and schedule students and activities. A lot of time is spent on paperwork--record keeping and grouping. Some teachers began to "burn out" after a year or two in the program because of the amount of work and time the program takes.

There were three other causes that the panel suggested that were not covered by the checklist or discussed by the respondents. In implementing IGE, some thought it was fashionable, in vogue, to get on the "bandwagon" to adopt an innovative program. When the novelty wore off, the program was abandoned. The commitment was never really there to make the adoption long term. Also, a number of schools tried to "go it alone." They attempted to implement the program without outside assistance. There was a need for support and resources from others to make the complex changes. They were not able to "pull it

off" and the program was discarded. Finally, the importance of the linkage among teacher education institutions, leagues, and other resources to achieve success with IGE was mentioned. By coordinating and utilizing these support systems, the successful implementation of IGE was possible.

Other Principals

In the final screening interviews, 32 schools were eliminated from the population under study. After the interview, the principal was queried as to why his/her school had discontinued its IGE program. The comments relevant to the study follow.

Variable 1: Lack of district commitment

We tried to institute IGE completely but had no district support. I had attended several workshops in Madison and wanted to make IGE go...suffering from declining enrollments...have lost teachers and aides.

District provided no extra clerical help. We had some volunteers.

The district allowed IGE to "exist" but gave no support.

We needed a central office person to assist with the program.

When we discontinued the program...no pros or cons from the district.

Variable 2: Withdrawal of financial support by the district

District is having financial problems and is not open to innovations.

We lacked materials...no financial help.

We lost all of our paraprofessionals...financial cutbacks. The program couldn't function as well.

Variable 5: Lack of commitment by principal

I really lacked time...was overburdened...was holding down two jobs.

Variable 6: Principal was transferred or changed

The principal was changed and the new one has a more conservative philosophy.

Variable 9: No IGE training for new staff

Had a complete change in administration and staff. New teachers came in...didn't know the program and were not interested.

New teachers had no knowledge of IGE...not interested.

Variable 10: Lack of teacher commitment

We lost faculty support...originally very strong. Had more discipline problems. We rushed into the program too fast and too soon. The school was built for the program. The parents felt the children were not getting the basics.

No strong feeling from the teachers against IGE but no support for it. Now they feel they are working less, the standardized test scores are going up, and they have more control over the situation with their own group.

We were forced into IGE by an administrative decision. The administration picked unit leaders, made up the units, and the staff was told to do its homework on IGE. Teachers had independent teaching styles and they were forced into units. There was no staff follow-through after they were in the program.

Never had teacher acceptance of the program.

Some teachers really felt threatened by the program.

Variable 11: Interpersonal conflicts among the teachers

Part of the school was unitized. There was resentment between the IGE and the non-IGE teachers over the programs.

Variable 12: Lack of communication with parents and the community

Parent pressure discontinued IGE. Children had too much movement...too much time on the "road"...running in the halls from room to room. Not enough time for instruction. Too much freedom and children were not keeping up academically.

Parents felt the basics were not intact...conservative neighborhood.

"Back to basics" movement...conservative area. Individualized instruction was not appropriate. The parents felt, "I told you so" when IGE didn't work.

Variable 13: Lack of understanding of the IGE concepts by the staff

Don't think the program was studied enough before we went into it.

Variable 14: Program was not adapted to the schools' needs initially

We had a problem with the unit size...150 children and 6 teachers was too large. Teachers didn't know kids. Were too many teachers to work together effectively.

Wonder if the needs had really been assessed.

Variable 16: Problems with record keeping

Just too much record keeping to do.

Variable 19: Problems related to unit leaders

Unit leaders were just teachers...given too much responsibility. They had to take a lot of "flack" from other teachers.

Variable 21: Philosophical differences about the program

Different superintendent...different philosophy about program.

Different superintendent feels that all units should do the same thing. Can save money when you buy the same kind of material for everyone.

Former superintendent played a big part in IGE initially...was innovative. New superintendent is traditional.

Variable 22: Program did not meet student needs

Multigrading and multiaging didn't work for us.

Variable 23: Rivalry between IGE and non-IGE schools

Schools in the district...half were IGE. Non-IGE schools felt they were not getting a fair share of things. District discontinued all IGE schools over this. We have kept some elements of IGE. No longer can belong to the league.

Variable 24: Program took too much time

Teachers "burned out"...families complained. Too much time to gather materials. Too much time setting up groups and too much time working on the Design.

Staff "burned out"...rewriting curriculum to adapt it to different grades.

Variable: Facilitative environment

There was no intermediate agency to help with implementation initially. Went to universities and colleges trying to get interest generated in IGE. Finally got the State Department of Education to help and the R & D Center.

Leadership at the state level...responsibility for IGE has wained. At the onset, we had good support. No one really able to assist with IGE. From push, to no push.

Other Variables

Found that our school was too small, too difficult to implement with so few staff.

School was reorganized...became an intermediate school.

> With declining enrollment...teacher turnover...many staff changes. Non-tenured teachers eliminated. Now letting tenured teachers go.

Summary of the Chapter

The data gathered through telephone interviews from 40 schools which indicated that they no longer considered themselves IGE schools were included in the chapter. Replies to the interview questions from respondents selected for the study were presented by school. A summary of the comments of the panel of experts relating to why schools abandon their IGE program followed. The chapter concluded with comments from the principals whose schools were not included in the study on why their school discontinued its IGE program.

In the last chapter, a summary and the findings and conclusions will be presented in relation to the five research questions which were posed. The chapter will conclude with implications for school practice and recommendations for successfully implementing educational innovations.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The final chapter includes a summary and the findings and conclusions relative to the research questions which were posed. In addition, implications for school practice and recommendations for effecting change and for successfully implementing educational innovations are tendered.

Summary

The purpose of this study was to discover those organizational and personal variables which have prevented some elementary schools from institutionalizing the complex educational innovation, Individually Guided Education. Through survey research techniques utilizing telephone interviews, data were collected from eight schools in five different states which had discontinued IGE after a period of three years. An interview schedule was used to interview 32 teachers, 8 principals and 4 district office personnel to answer the following research questions:

1. How did school personnel initially become aware of IGE?
2. What commitments were made to implement IGE in the school?

3. How was the IGE program implemented within the school?

4. What support was needed by the school to maintain its IGE program?

5. What variables caused the school to discontinue its IGE program?

A checklist was used to assist in tabulating the respondents' replies to the last question on the schedule. The variables listed on the checklist were those that a panel of experts conversant with IGE considered to be the most frequent causes for discontinuance. Utilizing the data from schools which had failed, implementors, districts, and schools may find clues for preventing failure when they initiate innovations.

Chapter I provided the background for the study. The terms "change," "innovation," and "institutionalization" as used by the researcher were defined. An overview of the evolution of the innovation, IGE, and the seven components which compose its system were presented. The activities developed by the R & D Center to implement IGE were also described. Several research studies which alluded to problems encountered in implementing IGE were reviewed. Finally, some research studies dealing with the failures of educational innovations to improve the educational climate were cited to provide the rationale for the study.

The study was limited to those schools that indicated on an IGE Schools Questionnaire that they no longer considered themselves

functioning IGE schools. From this group, 40 schools that had implemented IGE between 1971-1973 and that had functioned as an IGE school for three or more years were selected. The principals of these schools were interviewed by telephone and were asked when and what agency had helped the school implement IGE, when the school discontinued its IGE program, and if there still were teachers on the staff from the IGE period who would be willing to participate in the study. The screening process narrowed the population to a final group of eight schools. The findings from the study were gathered from those selected schools.

In Chapter II, a review of the literature provided some clues to the barriers which may prevent effective change and the successful implementation of innovations. Six strategies and processes of change were presented to provide a conceptual framework for the study. Since there is no accepted theory of educational change, the researcher utilized an eclectic approach embodying elements from many of the strategies and processes.

The methodology and the design of the study were described in Chapter III. The study was classified as descriptive research since the researcher examined events that had already taken place over which she had no control. Survey research techniques were used for gathering the data. A semi-structured telephone interview schedule was utilized by the researcher.

Eight individuals were interviewed by the researcher in a pilot study of the interview instrument. The interviewees found that the schedule met the stated objectives and was clear and unambiguous.

Included in the schedule was an interview checklist used for recording, probing, and rating the variables which respondents thought caused the school to discontinue its IGE program.

There were some limitations in the design and methodology of the study. Among them was the small number of schools remaining after the screening process from which respondents could be interviewed. Another was the difficulty in monitoring the effectiveness of the message between the interviewer and the interviewee during the telephone interview. The greatest limitation in collecting the data was the historical aspect of having respondents recall from memory people and events dating back as much as six years.

The responses of the interviewees were presented in Chapter IV. The background data on the respondents were categorized by school and by professional position. Several computer programs were used to analyze the replies to the interviewer's questions. The respondents' comments were categorized, evaluated, and included in the data presentation where appropriate. The demographic data on each school as detailed by the principal provided the setting for each school. The schools were identified by letter and the respondents were identified by position to protect the confidentiality and anonymity of their responses. The data from each school consisted of a description of the respondents' replies to the closed questions and responses to the open-ended question on what caused the school to discontinue its IGE program. The causes were listed in tabular form and the comments relevant to the causes were included to gain further insight into the

reasons for discontinuance. The chapter concluded with a summary of the comments made by the panel of experts and by the principals of the schools eliminated in the final screening.

Findings and Conclusions

This section contains the findings and conclusions relative to the study's five research questions. The replies of the respondents relevant to each question are presented in tables and are grouped by the respondent position. A summary of the findings from the tables is also included.

Findings and Conclusions Relating to Research Question 1

How did the school personnel initially become aware of IGE?

Recognition of IGE came about in 1971 when the USOE awarded funds for the national installation of the innovation. Information about IGE as a comprehensive alternative to the conventional age-graded, self-contained classroom was disseminated in a variety of ways. As a part of the background data on the respondents in the study, they were asked, *How were you first made aware of IGE?* This question focused on the various ways the respondents gained awareness. A compilation of the responses by position of the respondent is contained in Table 5.1.

The largest number of teachers heard about IGE from their principal. The second most important informer was another school district person, unspecified. About one-fifth of the teachers had gained their first insight into IGE at district workshops. Respondents

TABLE 5.1

HOW RESPONDENTS WERE MADE AWARE OF IGE BY POSITION

How Respondents Were Made Aware of Individually Guided Education	All Respondents	Teacher	Principal	District Office
Own school principal	10	10	-	-
School district personnel	7	3	2	2
College classes	6	5	1	-
District workshops	6	6	-	-
Already in school	4	2	1	1
School workshops	3	3	-	-
Other principals	2	1	1	-
State department workshops	2	1	1	-
Publications	2	-	2	-
Conferences	1	1	-	-
Parent-school-community committee	1	-	-	1
TOTAL	44	32	8	4

also indicated that in college classes they had attended, IGE was mentioned when studying individualized education.

The studies of Goodridge (1975), Chambliss (1968), Moore (1977), Smith (1972) and others found that the principal played the major role in fostering the acceptance or rejection of an innovation. Zaltman et al. (1977) found that the manner in which the information on change was disseminated by the principal to the staff differentiated between schools meeting change successfully and schools experiencing difficulty. A principal stated, "I didn't understand the IGE process and hadn't experienced any awareness so I really couldn't help the staff with a decision to adopt so they got the information from others." In another school a principal stated, "I guess only a part of the school was really aware of IGE." One new principal had come in with his own ideas, was not familiar with IGE, and convinced the staff that IGE should be discontinued.

A district office respondent had attended a variety of meetings to get acquainted with the concepts of IGE. She had worked closely with a university in developing meetings on IGE in the district and really tried to implement the program successfully. The new school administration with a different philosophy toward education withdrew district support for the program. Another teacher had learned about IGE in a district workshop and had hoped that the whole district would "go IGE." The district's interest dwindled and finally most schools gave up the program. Another teacher felt that in the beginning there was strong district commitment toward IGE and workshops were offered

districtwide. After the initial awareness sessions by the district and the decision to adopt the program by the schools, some parents said that they had not had any information on the program nor had they shared in the decision to adopt the program. The parent group finally brought enough pressure on the board and it discontinued the IGE program.

Only once during the implementation thrust by the R & D Center between 1971-1973 were awareness activities carried out (Klausmeier et al. 1974, p. 5). Initially, a printed brochure was distributed nationally to a sample of school superintendents and elementary principals. Following this, a series of one-day informational meetings was held for interested school personnel to provide enough information for them to make a decision to adopt IGE. Lack of funding prevented subsequent awareness activities, but personnel in some states received additional assistance from the R & D Center.

The researcher concluded that the role of the influentials (principal and district personnel) can improve and change teachers' attitudes and feelings toward innovations. As in the social interaction strategy of change (Chin 1963), adequate information about IGE should have been provided to them. Their initial training in the concepts and practices of the program cannot be overlooked since respondents indicated that the principal and the district office personnel had played key roles in developing the initial awareness. Goodridge (1975) found in his study that decision makers initially felt that they had an adequate knowledge about IGE. As time passed, they

realized that their understanding of the program was inadequate. In evaluating the R & D Center's attempts at awareness activities, the researcher feels that efforts, such as they were, were not transmitting the complexities of change to school personnel. The brochure and the one-day sessions could only scratch the surface. Zaltman (1977) indicated that change agents must do more than present knowledge and information when attempting to effect successful change. In line with Zaltman's suggestion, a number of follow-up sessions were needed to relate the concept of the innovation to the unique needs of the organization and its personnel.

Findings and Conclusions Relating to Research Question 2

What commitments were made to implement IGE in the school?

One R & D Center implementation strategy was to conduct three-day principal and prospective unit leader (PUL) workshops to provide school leaders with the knowledge and concepts of IGE and outline the procedures for implementing IGE within the school. In turn, these leaders were to conduct sessions on IGE in preparation for the staff to make a commitment to implement the program. Few of the principals and teachers interviewed had participated in a PUL. Three principals who had been in their schools during the IGE era had attended the workshops and had found them to be helpful in preparing them for conducting sessions in their school. Eight former unit leaders reported that the sessions were of some help when they assisted the principal with the staff development sessions. Only one district office

respondent had attended the Madison one-week invitational institute for state educational agencies, teacher education institutions, and district office personnel to acquaint them with IGE. She had found it to be very helpful for developing strategies to assist the school staff in the implementation of the program.

Another aspect of the implementation strategy was to gain a commitment from school districts to furnish, among other services, funds and training prior to implementing IGE in the schools. Through a Memorandum of Agreement, school districts participating in the establishment of a national network of IGE schools during 1971-1973 were to provide funds for staff to attend necessary workshops and to conduct district inservice sessions for retraining staff prior to the implementation of IGE. One teacher who had gone on staff after the initial implementation indicated that there was never any district commitment to the program while they were in IGE. One principal said, "My district is decentralized and the schools made their own decisions about programs and training." Another teacher felt that her district was never fully committed to IGE and only carried out part of the implementation strategy.

Failure to implement an innovation can come about when the staff lacks knowledge and skills to adapt to new role models (Gross et al. 1971, p. 122). With changes in the school organization, there are personal risks involved. Giacquinta (1975) stressed that the administration needs to have an understanding of the innovation in order to deal with personnel when positions and statuses change. One principal

said that the school had gone into the program too quickly and he had not had enough knowledge of the concepts to really help the staff implement IGE. "We were told that we would be an IGE school and our training came from a district workshop," said one former unit leader. One teacher reported that he had learned one day that he would become a unit leader the next day. He was unhappy about assuming the unit leader position without training. Adequate knowledge of the innovation by the leadership does facilitate the acceptance and the successful installation of the innovation by others (Carlson 1965).

From the respondents' comments and the small number of principal and prospective unit leader workshop participants, the researcher concluded that an important aspect of the initial implementation training was lacking and that some districts had not fulfilled part of their commitment to the program. Ironside (1973) found that there must be measurable amounts of awareness, commitment, and technical assistance available to schools. From the respondents' replies, it is evident that these factors were not present. Without adequate training necessary to understand and make a commitment to the innovation by the major participants and a commitment from the district to provide services and support, it is unlikely that the innovation will come to fruition.

Findings and Conclusions Relating to Research Question 3

How was the IGE program implemented within the school?

Before the actual implementation of IGE in the school, a staff

development workshop was held. It was conducted by the principal and the unit leaders with assistance from other IGE personnel as needed. The workshop presented the concepts of IGE as drawn from the PUL workshop while focusing on their adaptation in the local school. The workshop usually provided the first opportunity for teachers to function as units and for unit leaders to assume their new role in guiding the units.

All schools in the study had held staff development workshops in preparation for implementing IGE and 81 percent of the teachers interviewed had participated. The remaining teacher respondents had joined the school staff after the initial implementation effort and IGE already was in place. In rating the content of the workshop in relation to its value in helping teachers to implement IGE in their school, 31 percent of the teachers found it to be very helpful, 54 percent found it helpful, and 15 percent found it of little value. Even though 86 percent of the respondents placed some value on the workshop, one-half of the respondents mentioned it as one of the variables which may have led the school to discontinue IGE.

Gross (1976) examined variables that had been previously overlooked when studying the fate of innovations. In innovations that had failed, he found there was inadequate or no consideration given to the new skills and capabilities required of staff to implement the program and the management failed to provide essential services and materials. Successful implementation strategies involving quality planning and the keying of staff training into the local setting was

characterized by Berman and McLaughlin (1976) as mutual adaptation. The implementation efforts in mutual adaptation consider adapting an innovation to the particular organizational setting of the school and the school and its staff adapting to the demands of the innovation. Lack of mutual adaptation was evident in the comment of a respondent who indicated that part of the failure of their program was due to the program being brought in from the outside and set in the school. "We needed to work from the inside-out." Zaltman et al. (1977) referred to this as an "outside-in" perspective which provides a very limited view. Some failures also result when there is a lack of recognition of conflicts that arise between the innovation and other aspects of the program (Gross 1976). One respondent who had assisted with the staff development workshop summed it up by stating, "At the beginning we really should have worked on the basic educational philosophy of the teachers."

While all schools in the study held staff development workshops before IGE was implemented, the researcher concluded that the training the staff had received may not have been as helpful as respondents first thought. In response to a later question concerning causes for IGE to be discontinued, a number of respondents rated inadequate initial training as a cause. Responses to the question concerning implementation within the school indicated that the leadership responsible for implementing IGE in some schools had not received sufficient training for preparing their staff for the change in roles and program that the innovation entailed.

Findings and Conclusions Relating to Research Question 4

What support was needed by the school to maintain its IGE program?

A support system is needed to help the school strengthen its program. In the school, a resource person who is knowledgeable about IGE can assist the principal in facilitating the program. District office personnel can serve as an IGE resource and can function as the liaison between the schools and the district office in supporting and maintaining IGE.

Respondents indicated that a commitment to the program by the district was important for the program's survival. Several school districts had had a superintendent who encouraged schools to adopt innovative programs and when the superintendent left, the district office support was lost. One school no longer had the services of its IGE resource person when a new principal wanted to discontinue the IGE program. The staff felt that they could not carry on the program without the support of the principal and the resource person. One district told the school they would become an IGE school and then failed to provide support services to implement the program. As part of their responsibilities, three district office respondents worked with schools when they were implementing IGE.

Respondents were asked to indicate the types of training they had received which they felt gave them some additional support and help in working with IGE. Their replies to the question are shown in Table 5.2. College classes provided additional IGE training for

TABLE 5.2

NUMBER OF PARTICIPANTS AND RATING OF OTHER TRAINING BY TYPE OF TRAINING AND POSITION OF THE RESPONDENT

Type of Training and Position of Respondent	Number of Participants	Rating of Training		
		Very Helpful	Helpful	Not Helpful
College classes				
Teacher	7	3	4	-
Principal	2	2	-	-
District office person	3	1	2	-
School workshops				
Teacher	6	1	4	1
Visited other IGE schools				
Teacher	4	2	2	-
PACT, League				
Teacher	2	2	-	-
Principal	1	-	-	1
2nd IGE Institute-Madison				
District office person	1	1	-	-
District workshops				
Teacher	1	1	-	-
Principal	1	-	1	-

TABLE 5.2 (Continued)

Type of Training and Position of Respondent	Number of Participants	Rating of Training		
		Very Helpful	Helpful	Not Helpful
State workshops				
Teacher	3	3	-	-
Individually Guided Science				
Teacher	1	-	1	-
AIGE				
Principal	1	1	-	-
TOTAL	33*	17	14	2

*Five respondents received more than one type of training.

19 percent of the teachers.

The scope of the involvement of participants in other IGE activities is shown in Table 5.3. The first three groups represent levels in the organizational arrangement of the local, regional, and state IGE network. The respondents represented their school and district on these organizations. The league or HUB is composed of groups of schools which meet to share experiences and to gain additional information about IGE. Other activities listed afford participants opportunities to meet with others interested in IGE.

Eight teachers, two principals, and three district office respondents had been involved in at least one IGE activity outside of the school. Six teachers, one principal, and one district office person had participated in two IGE activities. The respondents from two schools had not been involved in any additional IGE activities.

Respondents were able to participate in IGE activities through the use of substitute teachers, district conference funds, and funds from the county office for serving as an exemplary school. When districts withdrew additional funds for IGE schools, respondents were no longer able to attend conferences and meetings during the school day. The withdrawal of funds also eliminated participation in league activities since the district would not pay league dues. Some respondents indicated that they really missed the interaction and support that the activities fostered.

The researcher concluded that support at the district level was important for the program's survival. The interest in the program

TABLE 5.3

PARTICIPATION IN OTHER IGE ACTIVITIES BY
POSITION OF THE RESPONDENT

Other IGE Activities	Position of Respondent		
	Teacher	Principal	District Office
Systemwide Program Committee (SPC)	6	2	1
Regional IGE Coordinating Council (RICC)	1	-	-
State IGE Coordinating Council (SICC)	1	-	1
League or HUB	4	2	1
AIGE	1	-	-
Citizens Committee on IGE	-	-	1
State Conference	1	-	-
TOTAL	14	4	4

by the superintendent was communicated to the board and others at the district level. Such a commitment took the form of additional funding, materials, and support personnel. A change in the administration often leads to discontinuing a program unless the commitment to the program by the school board is strong enough to be transmitted to the new administration. In this study, the commitment by the board was not there to sustain IGE and the program was dropped. Further, involvement in activities relating to IGE provided respondents with support from others also committed to the program. When opportunities for involvement were eliminated by the district, the commitment by the staff to IGE suffered. They felt the district was no longer supportive of the program.

Findings and Conclusions Relating to Research Question 5

What variables caused a school to discontinue its IGE program?

One purpose of the study was to discover those variables which caused schools to discontinue their IGE program. From the question asked of the respondents, *What do you feel caused your/the school to discontinue its IGE program?* 24 variables were identified. The respondents were asked to rate each variable they considered as a cause from "1" = a very significant cause to "5" = having little significance. In order to tabulate the data from the respondents, it was necessary to add nine more variables to the original interview checklist and the added variables are noted. Table 5.4 lists the identified variables in order of the lowest means by the position of the respondent.

TABLE 5.4

CAUSES FOR SCHOOLS TO DISCONTINUE THEIR IGE PROGRAM IN ORDER OF LOWEST MEANS BY RESPONDENT

Cause for Discontinuance	Means+	Rank Order			
		Respondents	Teachers	Principals	District
Lack of teacher commitment	3.86	1	1	3	5
Withdrawal of financial support by district	4.05	2	2	4	2
Lack of district commitment	4.25	3	3	11	12
Lack of commitment by school board	4.32	4	4	2	--
No IGE training for new staff members	4.57	5	9	6	4
No continuing staff development	4.59	6	12	5	1
Interpersonal conflicts among teachers	4.61	7	11	1	16
Principal transferred or changed	4.70	8	8	12	9
Program not adapted to school's needs initially	4.70	9	6	8	13
Lack of understanding of IGE concepts by staff	4.89	10	13	9	6
Initial staff development weak	4.91	11	10	16	8
Problems with WDRSD*	4.93	12	5	--	--
Leadership lacking in principal	4.95	13	7	7	7

*Variable added to original checklist
+Means computed by multiplying frequency by rating with a "6" assigned to a "no response"

TABLE 5.4 (Continued)

Cause for Discontinuance	Means+	Rank Order			
		Respondents	Teachers	Principals	District
Lack of communication about IGE to parents/community	5.11	14	14	15	17
Lack of commitment by principal	5.23	15	18	--	3
Philosophical differences over program*	5.32	16	19	10	14
Problems grouping students*	5.34	17	17	13	--
Program did not meet student needs*	5.34	18	15	--	--
Program took too much time*	5.45	19	16	--	--
IGE resource people left*	5.50	20	21	--	11
Problems related to unit leaders*	5.59	21	20	--	--
Withdrawal of other financial support (Title funds)	5.66	22	22	--	10
Problems with record keeping*	5.70	23	23	--	15
Rivalry between IGE and non-IGE schools*	5.86	24	24	14	--

*Variable added to original checklist
+Means computed by multiplying frequency by rating with a "6" assigned to a "no response"

Among the five variables with the lowest means (most significant causes) listed in Table 5.4 only two variables, lack of teacher commitment, and withdrawal of financial support by the district, were common to all respondents. A discussion of the reasons for the lack of commitment on the part of teachers follows.

In a study by Ironside (1973, p. 6) on the implementation of the MUS/IGE elements, he speculated that among factors affecting successful implementation was the need for strong teacher commitment at the outset. In the comments of some respondents there was evidence that this was lacking. "A few of the teachers were not for IGE and I believe that you need 100 percent to be successful." "Some teachers didn't want to take time to get involved in individualizing. They would rather teach the skills themselves." After schools had been in the program for a period of time, teacher commitment began to drop off. "Lots of the staff left the school because of the program. It was too much of a strain and they couldn't cope with the demands of the program." "Teachers felt it was too much trouble to shift students and they went back to self-contained classrooms." One respondent indicated that the lack of teacher commitment was brought about in several ways.

> IGE was not popular among the teachers. The program took too much record keeping and planning time. Units would finish before others and we couldn't change students. We couldn't get enough volunteers for grouping. In the three-week cycles, we never felt that we really got to know students. For unit planning time, there was no one to take classes. We didn't have any specialists.

The researcher concluded that based on the respondents' replies, the loss of teacher commitment involved a host of factors both internal and external to the school. The researcher speculates on causes for the loss of commitment later in the chapter.

Goodridge (1975) found in his study that while teachers agreed to adopt the concepts of IGE, some did not really make a commitment to the system and never modified their instructional methods or behavior. This was characterized by Berman and McLaughlin (1976) as non-implementation where the participants were indifferent and there was no real adaption to the innovation. Gross et al. (1970) reasoned while an individual may support change initially, obstacles and frustration may occur if the new practices do not solve existing problems and are not compatible with one's teaching style. Misjudgment of staff acceptance of an innovation can also lead to the failure of an innovation to be fully implemented (Walker 1976).

The impact on the program by the withdrawal of financial support by the district was felt in several ways. The aides were cut back or they were completely eliminated from schools. Respondents said, "The district took away aides because of money problems and we had a hard time grouping," "There was no clerical help for record keeping," "We did what we could with the personnel we had," "The board was no longer providing additional financial support," and "They found that aides were too expensive." One teacher reported that the district cut back their budget, the student-teacher program was dropped, and aides were cut.

Another financial issue which caused discontent among respondents was unit leader pay. "The unit leader pay was a big issue with us. After several years we felt we should have extra pay." "The teachers went to the board with all or nothing." The teachers at one school decided when the district turned down their request for unit leader pay, then the district was no longer committed to the program and the school dropped IGE. In an elementary school that failed to implement the multiunit school structure, Smith (1972) also noted that the staff continually discussed the lack of money to pay people for extra work.

In some school districts, rivalry over district funds existed between IGE and non-IGE schools. "The budget was supposed to be the same for everyone regardless of their program. The non-IGE schools felt they were being slighted because the IGE schools were getting additional things." "The amount of money to our school was not in proportion to the rest of the district. There was too much for too few. It was not fair to the other schools in the district." There was pressure on districts from non-IGE schools to drop the program. They claimed funds and personnel were being alloted unequally among schools in the district and IGE schools were receiving much more than their fair share. Respondents indicated that to avoid the rivalry issue, districts simply withdrew their commitment to support IGE and the program was eliminated.

Shane (1973) found that a community could contribute to the failure of a program by not supporting increases in local school taxes

to support the innovation. "After our local tax referendum lost out, our IGE program was the top priority to be cut." They complained, "Why should I support the program? I didn't have it when I was in school." "The impact on the schools," reported one respondent, "meant that clerical help was no longer available, there were no resource people to help schools follow the model, IGE inservice was discontinued, and unit leaders lost their released time."

While respondents rated the withdrawal of financial support as a single major cause for discontinuing IGE, the researcher concluded that it was tied to the district's commitment to the program. For undertaking innovative programs, extra money usually must be budgeted to put it into operation. With the decline in student enrollment and the loss of state and local monies and the continual defeat of local tax referendums for school levies, school districts have cut back programs and services. In the process, the innovative programs seem to be the first ones to go. In the case of IGE schools, aides were eliminated, extra pay for unit leaders was turned down, resource personnel for the program were dropped, funds for attending conferences and dues for membership in IGE leagues were cut. If the district is really committed to the program, non-IGE schools need to be made aware of why it is necessary to have funds and services to implement the program. Even if there are budget cuts, if the district is really committed to the concepts of IGE, ways can be found to keep the program in operation. The district must work with the school to find or develop other alternatives to replace or provide the necessary

services and personnel.

The variables, lack of district commitment and lack of commitment by the school board, have been combined for the purposes of the discussion. Gross (1976, pp. 10-12) identified certain factors as barriers to successful change and among them was, "the failure of the management to recognize the need for strong support and protection from the central administration and the school board during all phases of the change process." Teacher respondents felt there was never any district commitment to the program. "We didn't get any help from them." "The board had been very supportive of the program, but discontinued the program because of the pressure from a group of conservative parents." "When the board discontinued our IGE program, one of the factors could have been the lack of student gains."

The importance of the role of the superintendent in fostering or discontinuing the program is shown in these comments: "The superintendent learned about IGE and took district people to Madison. They brought the ideas back to the schools. The teachers felt their own setting was not like the model but they would try it anyway. A new superintendent came in with a different philosophy and the program was discontinued." The change in the superintendent did make a difference in other schools. "Our former superintendent was very pro-IGE and he encouraged schools to go IGE. There was a change in district philosophy with the new person." "When the superintendent left, the district developed a different philosophy. Instead of having 139 different programs going, we have only two and IGE isn't one of them."

When a school attempts to initiate change and to implement an innovation, the researcher concludes that the school district and the board must have a part in the decision. If there is no share in the decision, then there is no ownership in the program and no reason to support it. The district should be involved every step of the way. Conversely, if the district wants a school to undertake a major change, the school should be involved at every step. The decision to implement must be made jointly with all parties aware of what the commitment will involve. It is probable that some districts and superintendents were "opportunists" (Berman & McLaughlin 1976), committing the district and the school to implement innovations because it was the thing to do. Some boards were easily swayed by the administration and undertook a lot of programs without looking at the long-range effects on the students. In the process, boards overextended themselves both in funds and personnel. The real commitment to programs never really existed and some were discarded after a short period in the schools. Indications are that some schools in the study never had a commitment from the district or the board and the innovation never had a chance to be successful.

The variables dealing with the principal, principal transferred or changed, leadership lacking in the principal, and the lack of commitment by the principal, have been combined for the discussion. The philosophy of the principal toward the program can mean the continuance or discontinuance of the program. A teacher commented that the former principal was looking for a position in higher

administration and had worked closely with the superintendent in getting the district to adopt IGE. When the superintendent was replaced and the principal went elsewhere, the new principal dropped the IGE program. Several respondents indicated that when their former principal left, the new principal had no knowledge of the program and did not support it.

The researcher believes that the principal, as the instructional leader of the school, must have a thorough understanding of the program and really want it to survive in the school. In an attempt to "look good" in the eyes of the administration, the principal can push the program on the staff. In his/her zealousness, the staff can be "turned off." When a principal is transferred, an IIC can play a role in helping to save the program and facilitate the new principal's knowledge of the program and how it is being implemented in the school. In any event, the principal needs to maintain a leadership role while dealing cooperatively and flexibly with the staff while the innovation is being implemented. How the principal uses his or her position is a good indicator of whether a program will be effective and can survive.

The findings and conclusions which have been presented were drawn from the data obtained from respondents representing a small number of schools which had discontinued their IGE program. The findings only apply to those schools included in the study. However, based upon this research, a review of the related literature, and many years of experience as a teacher and educator, the researcher would like to

speculate on some implications for school practice.

Implications for School Practice

The purpose of this study was to discover those organizational and personal variables which constrained the institutionalization of Individually Guided Education within some schools. The implications for practice will deal with the findings as they relate to participants in the organization and how they affected the discontinuance of IGE.

The Principal

When a principal is moved from a school after effectively instituting change, it is difficult to continue the momentum with a new person if he or she is not familiar with the program. Research indicates (Moore et al. 1977, & Goodridge 1975) that a principal can block or facilitate change. Pressure from internal and external sources can easily sway the decision to continue or drop a program, particularly if it causes a conflict in his or her educational philosophy. Thus, the personnel responsible for hiring a new principal ought to take a careful look at the match between the program and the new principal's educational philosophy and skills.

Since a principal assumes the role of an instructional leader, employing shared decision making among the staff members, additional administrative skills are required. The R & D Center implementation strategies provide these skills in the principal-unit leader workshops

and staff development activities. However, it is not known how many actually participate in such skill building activities.

The Teachers

Developing a commitment to change and to implement an innovation involves time and knowledge to accept changes in roles, teaching style, interaction with students, and the use of materials and facilities. Not every teacher can accept change, particularly when it is thrust upon them (Woods 1967, Pincus 1974). The option to transfer to another building should be available to those teachers who feel that they cannot work with the innovation. In some cases, teachers remain loyal to a building, will not participate in the new program, and cause conflicts for the committed members of the staff. Through effective inservice training, the fear of the unknown engendered in some teachers can be alleviated and they can function within the program. Interpersonal skills are needed when working as a unit member. Staff development activities included in the R & D implementation activities provide these skills. However, not all participants rated them as very helpful. Therefore, the R & D Center might wish to examine the effectiveness of its training programs.

The Superintendent and District Office Personnel

The school staff needs the support of a member of the district office to assist in implementing the innovative program. These persons also can interpret the program to other district office administrators and the school board to gain their support. When change is

instituted and an innovation is to be implemented, support to the school must be in the form of necessary resource personnel, materials, and inservice training. The R & D Center implementation activities include an awareness workshop for district personnel which provides an overview of the program and outlines the district's responsibilities for implementing IGE in the schools. Newer materials from the R & D Center include greater involvement of district office personnel, especially in urban areas.

The School Board

The school board has the responsibility of deciding to implement or reject an innovation in the district. It also controls the financial resources of the district. If a decision is made to accept an innovation, the board must commit itself to providing the necessary resources of time, money, personnel, facilities, and materials to "make the program go." Too often a board is pressured into adopting a new program and is not aware of the long-range commitment that must be made to keep the program operating successfully. While the board is a political body, the decision to adopt should be arrived at after careful consideration and not through pressure tactics from the public or "opportunistic" administrators. A long-range commitment to the program must be made by the district to insure that the program has every opportunity to be successful.

The School

The school provides the organizational environment for the

implementation of the innovation. To maximize the opportunity for the implementation to be successful, the needs of students, parents, and teachers should be assessed; the educational philosophy of the staff clarified; and the extent of the district's commitment to the program obtained. In addition, consideration should be given to modifying, adapting, or replacing the existing curricular programs which are to be utilized with the Instructional Programming Model. A comprehensive inservice program devised by experienced IGE resource personnel can provide the staff with the needed knowledge and skills for making the changeover to IGE.

Plans should be made by the staff for the continuous evaluation of the innovation to assess the progress of the program toward meeting school and unit goals (Spuck 1976). Through formative evaluation, the rate of progress toward achievement of the school's instructional goals can be ascertained. Modifications can be made in the implementation strategies and a relevant program of ongoing staff inservice established. In addition, the evaluation data provide the school community and the district with information on how well the school is fulfilling its commitment toward implementing the innovation.

Through extensive staff development activities, proper decisions can be made, feasible strategies for change can be developed, and requisite commitments can be made toward implementing IGE within the school. It takes time and personal commitment to effectively institute change and a school cannot implement the change alone. There must be support from the school community and a long-range commitment

to the program by the school district.

While the lack of teacher commitment was considered to be the most significant cause for a school to discontinue its IGE program, the researcher speculated that many other variables cited contributed to the loss of commitment. For example, the withdrawal of financial support by the district and the lack of school board commitment eliminated aides, additional pay for unit leaders, conference expenses, and additional instructional materials. The lack of commitment by the district meant no support for the program in the face of criticism from non-IGE schools, the elimination of released time for unit leaders and unit planning time, no support and resource personnel from the district office, and no district workshops on IGE. Without provisions for an ongoing staff development program, there was no way to provide additional understanding of IGE concepts, to develop a philosophy on individualized education; to refine skills for adapting the program to the needs of the students; to perfect management skills for utilizing time, grouping students, record keeping; and to develop skills for assuming new roles as unit leaders and unit teachers.

Since the principal is the educational leader of the school, without his or her commitment to the concepts of IGE, teachers individually cannot sustain the program and parents and the community are not informed of the program's concepts and goals for students. The teacher respondents in the study ranked the lack of teacher commitment, brought about by a variety of reasons, as the prime reason for the IGE program to be discontinued in their school.

Recommendations for Effecting Change and Implementing Educational Innovations

One is overwhelmed by the complexity of the task when attempting to facilitate change within an educational organization. The number of known variables makes the task seem almost impossible. Drawing from the research, from the findings of this study, and from experience in education, the researcher will attempt to formulate some recommendations that she feels may make it possible to meet success when attempting to institutionalize an educational innovation.

First: Has the present program been evaluated? If it is providing the maximum opportunities for students to meet educational and personal success, there is probably little need to change it. If the evaluation indicates that changes in the program need to be made, care must be taken when selecting an innovation. The program should have undergone extensive field testing to insure success when it was implemented in the school.

Second: If an innovation is to be adopted, the inservice sessions must be well planned and comprehensive in scope to provide staff with as much knowledge as they need about the program. Too often the need for additional personnel, time, and instructional materials is glossed over in an effort to sell a program. The lack of such information can easily lead to the failure of the program.

Third: The teachers and the principal must be prepared to make a commitment to adopt and implement the program. This involves enough inservice sessions conducted by experienced personnel to acquire an

adequate knowledge base to institute change and to install an innovation. Enough time should elapse for developing an understanding of the concepts and philosophy of the program.

Fourth: A long-range commitment must be made by the district to support the program in every way possible. There should be someone from the district office who is aware of district constraints and resources and is responsible for overseeing the implementation of the program, and for providing expertise when needed. This person can also keep the superintendent and the school board apprised of the program's progress.

Fifth: A supportive environment should be available. Are there other schools using the program which could provide assistance? If possible, an SPC or similar group should be organized to coordinate the activities and programs of all the IGE schools in the district. In addition, opportunities should be made available for attendance at league or area conferences for the exchange of information and materials on IGE.

Sixth: Credit courses should be available at colleges and universities to assist staff in refining and renewing IGE skills. With the expertise and materials available at these institutions, training in specialized areas such as interpersonal skills and classroom management can be offered.

Seventh: An open transfer or transfer without prejudice policy should be available and implemented in the district for those teachers who feel that they cannot make a commitment to implement the innovation.

It must be remembered that not every teacher can work successfully in every program and other options should be open.

Eighth: There should be open communication among school staff members, the district office, and schools not participating in the program. Too often schools and people are critical of programs they do not understand and their criticism can destroy the public's confidence in an innovative program. The criticism also can lead to the withdrawal of support for the program by the district office and the school board.

Much can be gained toward the successful implementation of Individually Guided Education by studying schools which have experienced success and others which have failed. IGE has a great deal to offer the educational community since it incorporates many of the elements of other educational innovations while focusing on the continuous progress of the child. Above all, schools and teachers who have experienced Individually Guided Education will never be quite the same.

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APPENDICES

APPENDIX A

Interview Schedule - Panel of Experts

Organizational and Personal Constraints on the Successful Implementation of IGE

Time Started _____

Time Completed _____

PANEL OF EXPERTS

Interviewee _____ Date _____

Present Position _____

What has been your involvement with IGE?

How long have you been involved with IGE? _____

In your opinion, what causes a school to abandon their IGE program?

APPENDIX B

Introduction - Principal

Date _____

Hello _____,

This is Marilyn Gaddis calling from Madison, Wisconsin. I'm associated with the Wisconsin Research and Development Center as a Research Assistant.

I'm contacting some schools which indicated on the IGE Schools Questionnaire of March, 1976 that they no longer consider themselves IGE schools. Your school was one of that group. I would like to confirm some information with you.

Would this be a convenient time for you to take about 5 minutes to answer some questions?

YES - SKIP TO SCREENING QUESTIONNAIRE ——→

NO - "What would be a convenient time for me to call you again?"

_____	_____	_____	_____
day	date	their time	my time

I will be talking with you again on _____

Thank you very much, _____.
principal's name

APPENDIX C

Screening Questionnaire

Respondent _____	Time Started _____
School _____	Time Completed _____
Date _____	Total Time _____

1. When did your school begin to implement IGE? _____ (date)

   (If other than 1971, 1972, or 1973, SKIP TO CLOSING →)

2. What person(s) or agencies helped you with your implementation?

   _____ (person(s)/agencies)

   (If other than R & D Center), SKIP TO CLOSING →

3. When did your school disontinue its IGE program? _____ (date)

   (If school was IGE less than 3 years, SKIP TO CLOSING →)

4. Were you the principal when your school implemented IGE?

   YES NO

5. Do you still have teachers on your staff who served as unit leaders?

   YES NO - SKIP TO CLOSING →

6. Do you still have teachers on your staff who worked in the units?

   YES NO - SKIP TO CLOSING →

7. Is there someone in the district office who assisted your school with its IGE program?

   YES - Do you suppose that it would be all right for me to talk with them?

   YES - May I have the person's name, title, address, and telephone number?

_____/_____
name title

_____
address

_____
phone number

NO

8. Would you be willing to participate in a research study to ascertain why some schools have discontinued their IGE program?

YES NO - SKIP TO CLOSING →

9. I will interview you by telephone at a time convenient for you. The interview will take approximately 20 minutes. Your replies will be treated anonymously.

What would be a convenient day and time for your interview?

_____ _____ _____ _____
day date their time my time

10. Also, would it be possible to conduct 10-15 minute interviews with 2 unit leaders and 2 teachers?

YES NO - SKIP TO CLOSING →

11. May I have the names of the teachers who served as unit leaders?

1. _____
2. _____
3. _____
4. _____
5. _____

12. May I have the names of those teachers who worked in the units?

1. _____
2. _____
3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

13. I have listed the names you have given me beside a number. Since I will need to interview only 2 former unit leaders and 2 teachers, I have a box of numbers by me and I will draw out 2 numbers for each group. (DRAW NUMBERS - MARK NAMES UNDER #11 and #12)

I would like to interview _____ ← READ NAMES THAT ARE MARKED #11 and #12

14. We can discuss the scheduling of their interviews after your interview on _____ ← SEE #9.

15. Do I have the correct name and address of your school? READ

_____
school name

_____
school address

_____

16. Do I have your name spelled correctly. _____ ← SEE BOX AT BEGINNING

You will be receiving a letter providing you with more information about the research study and confirming your interview date and time.

I certainly appreciate your help and I will call you again on SEE #9 ← for your interview and to arrange the

interview time for the former unit leaders and the teachers.

Thank you so much for your cooperation.

Time Completed _____

→ CLOSING -

I certainly appreciate your help and thank you so much for the information.

APPENDIX D

Introduction - School District Personnel

Respondent _____

School District _____

Date _____

This is Marilyn Gaddis calling from the Wisconsin Research and Development Center. I have talked with _____ of _____.
principal's name school's name
He/she gave me your name as the district office person who assisted his/her school in implementing IGE.

I'm a Research Assistant and I'm conducting a study to determine why some schools have discontinued their Individually Guided Education (IGE) program.

If you have no objection, I will read a brief statement about the study: (WAIT FOR REPLY)

"I am attempting to ascertain why IGE is continued in some school settings and is discontinued in others. It is hoped that the findings from this study will help schools have a better understanding of how to implement an innovation. Your participation in the study will be most helpful in answering questions that have been raised.

Specifically, I am attempting to find out:

1. How people became aware of IGE.
2. What commitments were made to implement IGE.
3. How IGE was implemented within the school.
4. What support was needed by the school to maintain IGE.
5. Why the school discontinued IGE.

Your replies will be treated anonymously."

1. Would you be willing to participate in such a research study?

YES → Could you take about 15 minutes right now to be interviewed? →

NO

YES

SKIP TO PERSONAL INTERVIEW - SCHOOL DISTRICT PERSONNEL ——→

NO

What would be a convenient day and time for the interview?

day	date	their time	my time

You will be receiving a letter providing you with more information about the research study and confirming your interview date and time.

I certainly appreciate your help and I will be calling you on ←—— for your interview.

Thank you so much for your cooperation.

APPENDIX E

Introduction to Telephone Interview -
Principal, School District Personnel

Respondent _____

School or District _____

Date _____

This is Marilyn Gaddis calling again from the Wisconsin Research and Development Center. Did you receive my letter of _____ which discussed the research study that you have been asked to participate in?

Is this still a convenient time for your telephone interview?

I really appreciate your willingness to be interviewed. After the interview, I will go over your responses with you to verify your answers.

Do you have any questions about the study before we begin the interview?

GO TO - PERSONAL INTERVIEW - SCHOOL STAFF OR SCHOOL DISTRICT PERSONNEL ⟶

APPENDIX F

Introduction to Telephone Interview - School Staff

Respondent _____

School _____

Date _____

This is Marilyn Gaddis calling from the Wisconsin Research and Development Center. Did you receive my letter of _____ which discussed the research study that you have been asked to participate in by your _____.
principal's name

Your school was selected from among schools that returned the 1976 IGE Schools Questionnaire and indicated that they no longer considered themselves IGE schools.

Your name was selected randomly from among the teachers and unit leaders who were in your school when it was designated as an IGE school.

I'll remind you again that your participation is voluntary and that your replies will be treated anonymously. Neither your school nor the staff will be named in the study.

I really appreciate your willingness to be interviewed. After the interview, I will go over your responses with you to verify your answers.

Do you have any questions about the study before we begin the interview?

GO TO - PERSONAL INTERVIEW - SCHOOL STAFF ⟶

APPENDIX G

Interview Schedule - School Staff

Respondent _____	Time Started _____
School _____	Time Completed _____
Date _____	Total Time _____

A. Present position? _____
B. Number of years in present position? _____
C. Number of years in present school? _____
D. Total years of teaching experience? _____
E. Total years of administrative experience? _____
F. Highest level of professional preparation? _____

1. Less than Bachelors Degree
2. Bachelors Degree
3. Bachelors Degree + 15 or more credits
4. Masters Degree
5. Masters Degree + 15 or more credits
6. Doctors Degree

G. How were you first made aware of IGE? CHECK

____ 1. Your school principal
____ 2. Other principals
____ 3. Other teachers
____ 4. School district personnel
____ 5. Visits to IGE schools
____ 6. Conferences
____ 7. Publications
____ 8. College classes
____ 9. 1-week invitational institute at Madison
____ 10. Other
____ 11. _____

H. Did you participate in a 3-day Principal-Unit Leader Workshop?

YES - VERY HELPFUL HELPFUL NOT HELPFUL

NO

I. Did you participate in a school staff development workshop to help you begin to implement IGE?

YES - VERY HELPFUL HELPFUL NOT HELPFUL

NO

J. Did you participate in an /I/D/E/A/ sponsored workshop or clinical?

YES - VERY HELPFUL HELPFUL NOT HELPFUL

NO

K. Have you had any other IGE training?

YES NO

What was the other training?

1. _____ VERY HELPFUL HELPFUL NOT HELPFUL
2. _____ VERY HELPFUL HELPFUL NOT HELPFUL
3. _____ VERY HELPFUL HELPFUL NOT HELPFUL

L. In what other ways have you been involved with IGE? NOT INVOLVED

_____ 1. Systemwide Program Committee (SPC)
_____ 2. Regional IGE Coordinating Council (RICC)
_____ 3. League or HUB
_____ 4. State IGE Coordinating Council (SICC)
_____ 5. AIGE
_____ 6. Other _____

M. I understand that your school is no longer an IGE school. What do you feel caused <u>your</u> school to discontinue its IGE program?

<u>SKIP TO CHECKLIST</u> ⟶

N. You have stated some reasons as to why you feel <u>your</u> school dropped its IGE program. Other schools have suggested some additional reasons. As I read the list to you, would you indicate whether or not you feel that these reasons may have also been causes for the discontinuance of IGE in <u>your</u> school.

ON CHECKLIST - <u>READ VARIABLES NOT PREVIOUSLY MENTIONED</u> ⟶

O. I will reread the causes that you feel may have led to discontinuing IGE. Using a scale of 1 as being VERY SIGNIFICANT and 5 as having NO SIGNIFICANCE, rate the causes.

RANK CAUSES ON CHECKLIST ⟶

REREAD RESPONSES TO VERIFY ANSWERS ⟶

⟶ ** PRINCIPAL --→ SKIP TO BACKGROUND DATA ⟶

SKIP TO STAFF INTERVIEW FORM TO SET UP INTERVIEWS ⟶

CLOSING -

If it is necessary, I will call you again to clarify the information that you have given me.

I appreciate your cooperation and interest in the study. Your school will be receiving a copy of the report after the study is completed.

Thank you so much for participating in the interview.

Time completed ___

APPENDIX H

Interview Schedule - School District Personnel

Respondent _____	Time Started _____
School District _____	Time Completed _____
Date _____	Total Time _____

A. Present position? _____
B. Number of years in present position? _____
C. Total years of teaching experience? _____
D. Total years of administrative or supervisory experience? _____
E. Highest level of professional preparation? _____

1. Less than Bachelors Degree
2. Bachelors Degree
3. Bachelors Degree + 15 or more credits
4. Masters Degree
5. Masters Degree + 15 or more credits
6. Doctors Degree

F. How were you first made aware of IGE? CHECK

____ 1. School principal(s)
____ 2. Teachers
____ 3. School district personnel
____ 4. Visits to IGE schools
____ 5. Conferences
____ 6. Publications
____ 7. College classes
____ 8. Other
____ 9. _____

G. Did you participate in a 1-week invitational institute at Madison, Wisconsin?

YES - VERY HELPFUL HELPFUL NOT HELPFUL

NO

H. Did you participate in a 1-day workshop for chief school officers sponsored by the R & D Center?

YES - VERY HELPFUL HELPFUL NOT HELPFUL

NO

I. Did you assist schools with their staff development workshops when they were implementing IGE?

YES NO

J. Did you participate in an /I/D/E/A/ sponsored 3-day workshop or clinical?

YES - VERY HELPFUL HELPFUL NOT HELPFUL

NO

K. Have you had any other IGE training?

YES NO

What was the other training?

1. _____ VERY HELPFUL HELPFUL NOT HELPFUL
2. _____ VERY HELPFUL HELPFUL NOT HELPFUL
3. _____ VERY HELPFUL HELPFUL NOT HELPFUL

L. In what other ways have you been involved with IGE? NOT INVOLVED

_____ 1. Systemwide Program Committee (SPC)
_____ 2. Regional IGE Coordinating Council (RICC)
_____ 3. League or HUB
_____ 4. State IGE Coordinating Council (SICC)
_____ 5. AIGE
_____ 6. Other _____

M. What do you feel causes schools to discontinue their IGE Program?

SKIP TO CHECKLIST ⟶

N. You have stated some reasons as to why you feel schools drop their IGE programs. Other school personnel have suggested some additional reasons. As I read the list to you, would you indicate whether or not you feel that these reasons may have also been causes for the discontinuance.

ON CHECKLIST - READ VARIABLES NOT PREVIOUSLY MENTIONED ⟶

O. I will reread the causes that you feel may have led to discontinuing IGE. Using a scale of 1 as being VERY SIGNIFICANT and 5 as having NO SIGNIFICANCE, rate the causes.

RATE CAUSES ON THE CHECKLIST ——→

REREAD RESPONSES TO VERIFY ANSWERS ——→

CLOSING -

If it is necessary, I will call you again to verify the information that you have given me.

I appreciate your cooperation and interest in the study. You will be receiving a copy of the report after the study is completed.

Thank you so much for participating in the interview.

Time completed ____

APPENDIX I

Background Data

Respondent _____

School _____

School

A. School enrollment? _____

B. Number of teachers? _____

C. Which best describes your school location? _____

1. City - 100,000+
2. City - 50,000 - 100,000
3. Small city or town to 50,000
4. Suburb of a large city
5. Rural area

D. Which best describes your school's socioeconomic level?
_____

1. Upper
2. Middle
3. Lower

E. Which best describes your school facilities? _____

1. Open space
2. Pods
3. Egg crate
4. Other _____

When your school was an IGE school:

F. Was your total school organized into units? YES NO

G. Were your units multiaged? YES NO

H. Did you use the Instructional Programming Model in at least one curricular area? YES NO

APPENDIX J

Cause Discontinuance of IGE - Check-list

Respondent _____

1 Very Significant
5 No Significance
> Rating

CAUSE DISCONTINUANCE OF IGE

CHECK-LIST

Responses (D) Discussed (P) Probed

Item #	Item	D	P	Rate	Comments
1	District Lack of district commitment				
2	Withdrawal of financial support by district				
3	Lack of commitment by school board				
4	Principal Leadership lacking an principal				
5	Lack of commitment by principal				
6	Principal transferred or changed				
7	Staff Development Initial staff development weak				
8	No continuing staff development				
9	No IGE training for new staff members				
10	Teachers Lack of teacher commitment				
11	Interpersonal conflicts among teachers				
12	Community Lack of communication about IGE to parents/community				
13	Concepts Lack of understanding of IGE concepts by staff				
14	Program not adapted to school's needs initially				
15	Other Withdrawal of other financial support (Title funds)				
16					
17					
18					

APPENDIX K

Letter to Principal

the
Wisconsin
Research and Development Center
for Cognitive
Learning

(608) 263-4200

the University of Wisconsin · 1025 West Johnson Street · Madison, Wisconsin 53706 [redacted]

The purpose of this letter is to provide you with more information about the research study that we discussed over the telephone on
It is also to confirm your interview date and time.

Research indicates that educators do not really know why educational innovations are able to survive in some school settings and are discontinued in others. The purpose of my study is to identify some of the reasons why schools discontinue an educational innovation after implementing it for three or more years. The innovation being studied is Individually Guided Education. Specifically, I am attempting to find out:

1. How people became aware of IGE.
2. What commitments were made to implement IGE.
3. How IGE was implemented within the school.
4. What support was needed by the school to maintain IGE.
5. Why the school discontinued IGE.

It is hoped that the findings from this study will help schools have a better understanding of how to meet success when implementing an innovation. Therefore, your participation in the study will be most helpful in answering the questions that have been raised. Your replies will be treated anonymously. The results of this study will be published as a technical report by the Wisconsin R & D Center and your school will receive a copy when it is available.

Your interview is scheduled for
at o'clock. After your interview, we can arrange for the unit leader and teacher interviews.

I do appreciate your cooperation and assistance. If you have any questions concerning the study, please feel free to call me collect at (608) 263-4280.

Sincerely,

Marilyn T. Gaddis
Research Assistant

Marvin J. Fruth

Marvin J. Fruth, Ph.D.
Faculty Associate
Studies of Individualized Schooling

APPENDIX L

Follow-up Letter to Respondents

the
Wisconsin
Research and Development Center
for Cognitive
Learning

(608) 263-4200

the University of Wisconsin · 1025 West Johnson Street · Madison, Wisconsin 53706

The research study in which you participated is an attempt to ascertain why IGE is continued in some school settings and is discontinued in others. It is hoped that the findings from this study will help schools have a better understanding of how to implement an innovation.

Specifically, I am attempting to learn:

1. How people became aware of IGE.
2. What commitments were made to implement IGE.
3. How IGE was implemented within the school.
4. What support was needed by the school to maintain IGE.
5. Why the school discontinued IGE.

Your replies are being treated anonymously and are being analyzed with those of other principals, teachers, and district office personnel. When the study is completed, your school will receive a copy of the technical report from the R & D Center.

I have enclosed a copy of the check-list that I used to record the reasons that you felt caused your school to abandon IGE. Would you please look over the list, make any changes and mail it back to me by June 3, 1977. I have also enclosed a self-addressed stamped envelope to use for returning the check-list.

Thank you again for your participation in my study.

Sincerely,

Marilyn T. Gaddis
Research Assistant
Studies of Individualized Schooling

APPENDIX M

Letter to other Principals

the
Wisconsin
Research and Development Center
for Cognitive
Learning

(608) 263-4200

the University of Wisconsin · 1025 West Johnson Street · Madison, Wisconsin 53706

I talked with you recently in regard to the study on why some schools discontinue their IGE programs. While I was not able to include your staff and school in the study, I am including some of the information that you related to me during our telephone conversation. May I assure you that your replies are being treated anonymously.

I am hopeful that the findings from the study will help schools have a better understanding of how to meet success when implementing an innovation. The results of the study will be published as a technical report by the Wisconsin R & D Center.

I do appreciate your assistance and cooperation.

Sincerely,

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Research Assistant

Marvin J. Fruth

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Studies of Individualized Schooling

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